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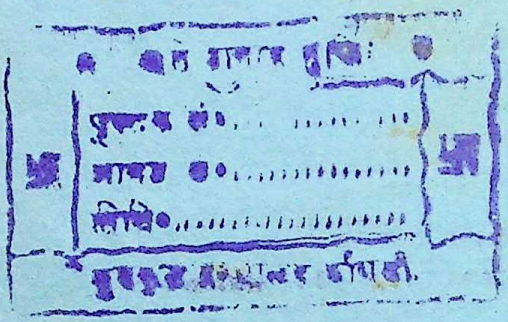

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JOURNAL OF THE ROYAL ASIATIC SOCIETY 1921

PART I.—JANUARY

The Portuguese and Turks in the Indian Ocean in the Sixteenth Century.

BY M. LONGWORTH DAMES

his paper *L'Arrivée des Portugais en Chine*, published in *T'oung Pao* in 1912, M. Cordier, before giving a more led account of the events in the Further East following ıe taking of Malacca in 1511, gave a lucid sketch of the ts accompanying the first establishment of Portuguese r in Eastern seas. I consider that these events require further set forth, for as far as I am aware the existing ries do not give any adequate and consecutive account struggle for the mastery of the Arabian Sea carried out ıe Portuguese against the Muhammadan states, and especially against the Turks, who in the sixteenth century he most powerful military state in the world. In this I propose to deal with this subject to the best of my .

en the brilliant period of marine exploration and dis- inaugurated by the great organizer known as Prince the Navigator [illegible] mination in the closing of the fifteenth century with the discovery of the sea e to the East, Portugal had opened a new page in

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history. The greatness of this exploit has been universally recognized, and the names of Bartholomeu Diaz and Vasco da Gama have long been inscribed on the roll of fame with those of the great explorers and sailors of all nations. Yet it may be doubted whether the true nature of the task which Portugal then undertook to achieve as the pioneer and forerunner of Europe has been fully realized. It is generally taken for granted that the Eastern trade, once the route by the Cape of Good Hope had been made known, fell of itself and as it were automatically, into the hands of the bold adventurers who "were the first who ever burst" into the Indian Ocean without the toils and dangers of the land passage, and that the wealth of the Indies thenceforward flowed in a smooth and uninterrupted stream to Portugal and to all Europe. But it is seldom recognized that in order to secure these benefits Portugal was embarking on a naval war of unprecedented length and difficulty against the greatest military power then existing. It is probable that the Portuguese leaders did not themselves realize it, for Turkey had not as yet, in 1498, made her way to the shores of the Indian Ocean. They did realize, however, that they would have to fight many powerful enemies before they could obtain control of the trade routes, and they prepared deliberately for the struggle. Selim Yawuz (or the Grim), a man of extraordinary vigour and ability, was not content with the grip he had obtained over Europe ; he contemplated nothing short of universal empire. India was at this time going through one of the periods of anarchy and weakness. The great Saltanat of Delhi had declined into decrepitude, and although some Afghan adventurers, the Lōdīs, had inspired it with new signs of life, it was incapable of recovering its old dominion in the Deccan. Most of the Musulmān kingdoms which had arisen on its ruins were themselves in decay. The Bahmani kingdom of the Deccan had split up into five small realms two of which reached to the sea-coast and held the region on which Bombay and Goa afterwards arose. Further north

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the coast was held by the strongest still surviving of the kingdoms which had succeeded that of Delhi, Gujarāt, the only one of them with any naval power, and the possessor of the famous ports of Kambāyat, Sūrat, and Diu. Mesopotamia, the Shatt-al-'Arab, and the northern coasts of the Persian Gulf were in the hands of the newly founded kingdom of Shāh Isma'īl, Safavī, who had established the Shi'a sect of Islām in Persia and was the principal object of the hatred of Selim, who regarded him as a detestable heretic as well as a dangerous rival, and, moreover, as the possessor of the only route by which access could be obtained to the Persian Gulf, the shortest way to India. The actual issue from the Gulf was held by the small mercantile principality of Hurmuz, which from its barren and torrid rocky island in the Straits controlled both the Persian and Arabian coasts, and grew wealthy on the tolls levied on the trade which passed through.

On the other side of Arabia lay the Egyptian kingdom of the Mamlūks, still apparently strong, ruling not only Egypt but Syria, and controlling the Red Sea and the sacred places of Islām.

To enable Selim to carry out his ambitious schemes, the control of the Persian Gulf or the Red Sea, or both, was necessary, and to obtain this control he must conquer either Persia or Egypt. Could he but obtain control of the sea-route to India, conquest of that country in its distracted condition would be easy for a Turkish army constituted and disciplined as those armies then were. India had long been the coveted object for the men of Turkish race, not Ottoman Turks, it is true, but of the same stock and speaking the same language. Maḥmūd of Ghaznī and Tīmūr were Turks, and Bābur, who, six years after Selim's death, overthrew the Delhi kingdom and established the so-called Mughal Empire, was also a Turkish adventurer. Ottoman Turks abounded in India, they were employed to form their body-guards by many of the Muḥammadan rulers, and were

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universally found as artillerymen; in fact, all the gunners in India seem to have been Turks.[1] They also held many of the official posts of importance. As a step to opening the way to these vast projects, Persia was first attacked. Shāh Isma'īl was defeated and crippled at the battle of Chāldirān in 1514. Kurdistān fell into the hands of Selim, but Persia was still able to retain her hold on Mesopotamia and the Persian Gulf, so that the scheme so far was a failure. Selim then turned his arms against the Mamlūks, and in 1517 succeeded in destroying their Government and annexing both Syria and Egypt. This gave him control over the Red Sea and the sacred places, and the sea-route to India for the first time became accessible to the Turks. But the Portuguese now stood in his way, and to understand the position it is necessary to go back a few years and consider what had been happening in the Indian Ocean.

At the extreme south of Western India lies the country of Malabar, a fertile strip between the Ghats and the sea. Here were some small Hindu states as yet untouched by the flood of Musalmān invasion. The principal of these was Calicut, and it was here that the Portuguese adventurers first touched Indian soil. They soon discovered that the Raja of that country looked on them with unfriendly eyes, for although he was a Hindu he was dependent for his revenues on the trade carried on by the Arab merchants with the Persian Gulf, Arabia, and East Africa. All attempts on the part of the Portuguese to obtain trade were resisted, and their leaders therefore made friends with two minor states, Cochin and

[1] No less than three out of the kingdoms which were formed out of the Bahmanī State were ruled over by men of Turkish origin, viz. Yūsuf 'Ādil Shāh, founder of the 'Ādilshāhīs of Bījāpur, Kāsim Barīd (often called Kāsim Turk), founder of the Barīdshāhīs of Bīdar, and Sulṭān Kuli Kuṭb Shāh, founder of the Kuṭbshāhīs of Golkonda. All three probably belonged to the Turkish tribes of Ādarbaijān. The claim afterwards made that Yūsuf 'Ādil Shāh was a son of Sulṭān Murād II of Turkey is probably baseless. I have dealt with this question in my note to my edition of the Book of Duarte Barbosa (Hakluyt Society), vol. i, p. 72, n. 1.

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Cananor, which were jealous of their more powerful neighbour. Trading stations or factories were soon established at these places, and a fort built at Cochin in 1506. The Portuguese were also on fairly amicable terms with the great Hindu Empire of Vijayanagar, which held the divided Muḥammadan states at bay over the remainder of South India, and came down to the coast north of Malabar and south of Goa. The Raja of this country hoped to get a supply of horses for his cavalry from the Portuguese, and to be freed from dependence on the Arab dealers. The principal Arab settlements in East Africa, Mozambique, Kilwa, and Mombasa, were taken and occupied by the Portuguese, and a settlement made in 1507 on the island of Socotra, near the entrance to the Red Sea. Thus a strong position was secured, and the fleets coming round the Cape were provided with harbours and means of obtaining supplies. Yet their trials and difficulties were enormous. Provisions were bad, and scurvy raged, crews were decimated, and the tiny ships frequently perished in the gales of the South Atlantic. Meanwhile, all the Muḥammadan powers surrounding the Arabian Sea were up in arms against the insolent intruders on their ancient monopoly in the lucrative traffic of the East, and before Turkey came on the scene they had combined to make one great effort to crush them. The leaders in this movement were the Mamlūks of Egypt and the Sulṭāns of Gujarāt, and active assistance was given by the rulers of Bījāpur and Aḥmadnagar, two of the smaller kingdoms which had arisen on the ruins of the Bahmanī kingdom, which, as has already been noticed, were interested in the maintenance of the Arab trade. Egypt, especially, found herself faced with the loss of the great revenues she derived from the trade which came by the Red Sea to Suez, and thence by caravans to Alexandria, where the Venetian and Genoese merchants paid heavily for the privilege of monopolizing the trade of Europe. Kambāya or Cambay, one of the principal emporiums of India, was in Gujarāt; Chāul in Aḥmadnagar, and Dābhōl

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in Bījāpur, were both very important trade centres. It was arranged that a fleet should be equipped at Suez and sent to India to co-operate with the light coasting craft of Gujarāt; assistance and co-operation was to be given by the other states, and information as to Portuguese movements obtained from Calicut. The Egyptian fleet was placed under the command of Mīr Ḥusain, Governor of Jedda, a Kurd by race, while the Gujarāt forces were organized by Malik Ayyāz, a Russian renegade taken prisoner by the Turks in his youth and sold into slavery in India, where he rose by his ability to be governor of the town and island of Diu.[1]

The Portuguese were under the Viceroy Francisco D'Almeida, one of the great leaders of the time, who was ably seconded by his gallant and popular son Lourenço, the darling of the troops and sailors. Lourenço's exploits, as described by contemporary chroniclers, resemble those of a hero of ancient romance. Gaspar Correa says in his account of a fight at Cochin [2] that Dom Lourenço, who had just been wounded in the hand by an arrow, "threw himself upon them with great fury, whirling his battle-axe round, and felled two of them so that they could not rise, and one javelin-man he dealt such a blow with his axe that he split him through the shoulder into two pieces, and another wielding a short sword he cut through both legs at the knees, and another he ran through with the spike of the battle-axe so that he fell dead. The rest, seeing these strokes, were seized with great terror, nevertheless they did not yield, but strove to wound him in the heels, no other part being uncovered, for he went all armed in white armour gilded in parts, and the darts they hurled at the vizor of his helm, but they could do him no hurt, and when they struck him with their soft iron swords they broke or twisted, whereupon they fled and took refuge

[1] This is the account given by De Barros (Dec. II, ii, 9), and is the most trustworthy. Correa calls him a Jão, or Javanese. Firishta says simply that he was the private slave of the Sultān of Gujarāt. Castanheda (i, 252) says he was a Tartar by nation.

[2] *Lendas da India*, vol. i, p. 612.

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in the mosques, and were no more willing to display their valour." Such was the young leader whose deeds have furnished the subject of the excellent historical novel of Pinheiro Chagas, *The Viceroy's Jewel*,[1] which adheres closely to the narratives of the chroniclers. He was the first Portuguese leader to visit Ceylon and open up friendly communications with the rulers of that country. In 1507 the Viceroy sent him north with a squadron to explore the coast as far as Gujarāt, to attack and scatter pirates and local hostile gatherings, but no rumour of the approaching storm from Egypt seems to have reached him. As he lay in the estuary leading to the then famous port of Chāul (a little way south of where Bombay stands now), into which he had run to escape the force of the monsoon gales, news was brought to him by a Hindu that a great Moorish (i.e. Muḥammadan) fleet had arrived at Diu, and had been joined by Malik Ayyāz with his light craft. The joint fleet was on its way to Chāul, and it would be well for the small Portuguese fleet to put to sea at once, and not to be caught in the river by a much stronger force. This was also Dom Lourenço's opinion, but he was overborne by the views of the majority of the captains, who thought the whole story a stratagem to tempt them out to sea, and unfortunately for him the squadron remained in the estuary. Even when the Egyptian fleet arrived off the bar the Portuguese sailors at first believed it to be that of Afonso D'Alboquerque, for the ships were of the European style such as had not been met with in India before. They were soon undeceived. The fleet came in over the bar and attacked the Portuguese vessels. In spite of their bad position the latter were able to beat them off, and the Egyptian fleet withdrew to a distance after severe losses. The next morning the Gujarāt light vessels, sixty *fustas*, came in over the bar, and the fight was renewed, lasting through the day and night. On the following day came

[1] *A Joia do Visorey.*

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the disaster. D. Lourenço's ship, in turning to go downstream, became entangled in a line of fishermen's stakes, and was for a time isolated among a swarm of *fustas*. There was still an opportunity of escaping in a small boat to the other ships, but the leader refused to leave any of his men behind, and they would not go without him. In the end a shot broke both D. Lourenço's legs, and he shortly afterwards died, telling the remainder of his men to surrender to Malik Ayyāz, who had promised to keep them as prisoners of the King of Gujarāt, and not to make them over to the Egyptian fleet. This they did, after first letting down the body of their commander into the swift current through a hole in the ship with all his arms and belongings, so that nothing of his should fall into the hands of the enemy. Part of the squadron escaped, but the blow to the Portuguese was a severe one, and thus the first serious fight in the long war was a triumph for the enemy. This battle took place at the end of April, 1507,[1] and it was not till the end of the next year that the Viceroy was able to collect a fleet of sufficient strength to avenge his loss. During this period Alboquerque, who had come out from Portugal with another fleet under Tristão D'Acunha, and had jointly with him taken the island of Socotra, made his first attempt (during 1508) to take possession of the island of Hurmuz, and so to seal up the entrance of the Persian Gulf. This attempt, successful at first, ended in a partial failure, owing to the mutinous conduct of some of his captains, who deserted him at the most critical time, and sailed away to India to traduce him to the Viceroy. It is evident that the lack of discipline in the Portuguese fleet, as in other fleets at the same period, was a source of great danger. There was no royal fleet; some ships were fitted out by the king, and others by private adventurers, and these always claimed liberty of action and held themselves free to disobey

[1] De Barros, dec. II, vii, f. 41; Correa, i, 762–71; Firishta, i, 204. Mirāt-i-Sikandarī in Bayley's *History of Gujarat*, p. 322 (Fazlu'llāh's trans., p. 75), gives the date as 913 H., which year began on May 13, 1507. Castanheda, i, 254, places these events in 1508.

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orders unless they approved of them. Alboquerque himself did much to reform this abuse at a later time, but it long remained a dangerous defect in the fleets sent out from Lisbon. Yet they were superior to their adversaries in seamanship and gunnery, and in a naval engagement under equal conditions they seldom failed to assert this superiority. This was shown most forcibly in February, 1509, when Almeida with his fleet sailed up the west coast of India, and after taking his revenge at Dābhōl for the assistance which had been given there to the Egyptian fleet, arrived at Diu, where he found the Egyptian fleet and the Gujarāt *fustas*, with a contingent from Calicut, assembled in the strait between the island of Diu and the mainland, where they were under the guns of the fort. The attack was made in the morning, with the sea breeze bringing in the Portuguese fleet. The fight was a desperate one; there was much grappling and boarding. Many ships were sunk, and the Egyptian fleet was completely broken up. How far it escaped absolute destruction is not certain. It is remarkable, however, that the native historians of Gujarāt, while laying great stress on the victory of Chāul, do not say a word as to the defeat at Diu. Mīr Ḥusain and his fleet are never mentioned again after their victorious return to Diu either by Firishta or by the author of the Mirāt-i-Sikandarī.

The Sulṭān of Rūm, who was the enemy of the European unbelievers (*Kāffār-i-Firang*), sent many ships to the coast of Hind for a holy war (*ghaza*) and protection, and many ships arrived near Gujarāt. Sulṭān Maḥmūd, eager to take part in the holy war, started towards the ports of Basi (Bassain) Daman (Dāmān) and Mahāim (Mahim), and when he arrived in the region of Daman he ordered his own private slave, Ayyāz Sulṭān, who was *Amīra'l-umarā* and *sipah-sālār*, to go from Dīb (Diu) with several picked ships to attack the Firangis, and ten large ships of the Rūmīs, who were come from the Khūnkār of Rūm for purposes of holy war, accompanied Ayyāz, and Ayyāz, having gone to Chēwal (Chāul), fought with the Christians; and one great ship of the Firang, worth one *Karor*, and in which was their leader, was battered and sunk by the cannon of the Musulmāns, and Ayyāz was victorious and slew very many.

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Although he lost four hundred of his own men, who drank the *sharbat* of martyrdom, yet two or three thousand of the Firang unbelievers were despatched to hell. (*Tārīkh-i-Firishta*, Newal Kishor Press, Lucknow, vol. i, p. 204.)

For the Khūnkār-i-Rūm, Briggs in his translation (vol. iv, p. 74) has the "Grand Seignior of Constantinople". Possibly Firishta himself did not know that the fleet was Egyptian and not Turkish.

The passage corresponding in the Mirāt-i-Sikandarī (Bayley's *Hist. of Gujarat*, p. 322), is as follows :—

The Sulṭān (i.e. Maḥmūd Bigarha) marched with his army to Chēwal, and in consequence of the disturbances caused by Europeans he marched towards Basai and Mahaim. On arriving at Diu he learnt that Malik Ayyāz, the Sulṭān's slave, and the ruler of Diu, had obtained a body of Turks and ten Turkish ships. With these he sailed to the port of Chēwal and fought with the disorderly Europeans. He killed a great many of them and with his guns sunk one large ship heavily laden. Malik Ayyāz lost 440 men, Turks and others, but he returned to Diu in triumph.

Neither of these authors even mentions the fight off Diu in 1509.

Mīr Ḥusain is heard of in the Red Sea as building fortifications at Jedda,[1] but never seems to have commanded a fleet again. Before the time of the Turkish conquest of Egypt by the Turks he was superseded by a corsair from the Mediterranean, a Greek renegade from Mitylene, named Raīs Sulaimān, and Mīr Ḥusain seems to have served under him in an unsuccessful attack on Aden.[2] Ultimately, according to De Barros, Mīr Ḥusain was thrown overboard and drowned by his successor's orders. At Gujarāt Malik Ayyāz hastened to make peace with the Portuguese by supplying the fleet with provisions and surrendering the Portuguese prisoners taken at Chāul. If Almeida had not been opposed to the policy

[1] See De Barros, dec. III, i, 6, f. 6, verso ; Book of Duarte Barbosa, i, 47–50.

[2] Ibid. III, i, 6, f. 8, and IV, i, 8, p. 24.

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of land acquisitions it is probable that Diu would have been surrendered to the Portuguese. As it was they did not obtain it till 1535.

Thus ended the first concerted attempt to expel the Portuguese from the Indian seas. It is to be noted that many historians, both Portuguese and Indian, speak of the Egyptian fleet as one sent out by the Sulṭān of Rūm or Constantinople. No doubt, even before the annexation of Egypt, the Turkish element was very strong in that country, and the composition of the fleet was like that of the Turkish fleets; a fighting element of Turks, mixed with Kurds and Circassians, sailors of all kinds from the Levant, mostly Christians by birth, and prisoners in the galleys under Turkish taskmasters. The native Egyptians had no voice in the matter. The confusion was therefore natural, especially as all the histories were composed after the Turks were in possession of the Red Sea.

From 1509 till the end of 1515 Afonso D'Alboquerque was the Portuguese Governor, a man of great ability and extraordinary energy. He did not share Francisco D'Almeida's objection to land settlements. He saw clearly that to maintain the struggle at such a distance from home it was absolutely necessary for Portugal to have a foothold of her own, secure from the caprices of native rulers. The first was Goa, on an island between two creeks, a secure harbour separated from the mainland by a shallow but easily defended channel. This had belonged to the Bījāpur kingdom. It was taken, lost, and retaken in 1510, and has been held ever since by Portugal. The second was Hurmuz, which held the key of the Persian Gulf. The ruler of this island had accepted Portuguese suzerainty in 1508, but, as described above, Alboquerque was prevented from completing his schemes. The last act of his rule and his life was the completion of the strong fort which still stands on the deserted and sun-parched rock as a memento of departed greatness. Portugal held this extraordinary island, by nature one of the most desolate places in the world, but important and wealthy by its position, till

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1622, and its loss was one of the principal causes of her downfall. After taking Goa in 1510, the indefatigable governor in 1511 conducted a most adventurous expedition to Malacca, one of the most important points for controlling the trade from China and the Spice Islands. This, too, became a Portuguese possession, and filled the position now occupied by Singapur and Hong-Kong combined. The fourth of the key-points aimed at was one which should discharge for the Red Sea the same function as Hurmuz did for the Persian Gulf. Aden was the only place that in any way corresponded with Hurmuz. Even Aden, however, could not perfectly seal up the Red Sea. Alboquerque made a bold attempt in 1513 to take by escalade this strongly fortified town. The attempt failed, and he then tried to reach and take the town of Jedda. He had vast dreams of converting the world and destroying Islām by taking its holy places. He had not, however, reckoned with the climate of the Red Sea. He could not reach Jedda, and his men perished from fever in the terrible island of Kamarān. He was unable to renew his attempts on Aden, and Portuguese power was never established there. Although the Indian Ocean became a dangerous place for Turkish ships, yet some trade continued to find its way to the Red Sea, and from time to time expeditions came out of it through the Straits of Bāb-el-Mandab. Also occasional Portuguese fleets went in through the same straits, but were never able to do much. In 1515–16, just before the Turkish conquest of Egypt, a small expedition under Raīs Sulaimān went out and tried to take Aden. Although the walls were battered down the Arabs were able to beat it off.[1] Soon afterwards Lopo Soares D'Albergaria, the incapable successor of Alboquerque, appeared in the harbour with his fleet. The Arab chief felt himself so helpless that he offered to surrender the fort to the Portuguese. The foolish Lopo Soares preferred to go on

[1] It had been intended that the fleet should go on to the Indian coast, but it was not able to go beyond Aden. See the account in Castanheda, IV, vii, 11–13.

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with the impossible project of taking Jedda,[1] actually reached it, and sailed back again. As with the first expedition, he was shut up in Kamarān by the monsoon, and lost most of his men, and when at last he got back to Aden he found that the Arabs had rebuilt their wall and laughed at the idea of surrendering the town.

Just before Lopo Soares arrived in front of Jedda the news had been received of the conquest of Egypt by Selim. Raīs Sulaimān, the governor, declared for him and was confirmed as Governor of Jedda. Selim at once pursued the plans for the invasion of India, but as the fleet of Egypt had been destroyed he had no means of carrying them out. He urged on the construction of a large fleet [2] at Suez, but did not live to see its completion. Selim died in 1519, and it remained for his successor Sulaimān, generally called "the Magnificent", to prosecute his schemes. Nothing was, however, done for some years, and the work on the fleet seems to have been retarded by a feud between Raīs Sulaimān and a Circassian named Ḥaidar, who succeeded him as Governor of Jedda, though not in command of the fleet. This ended in both being killed.[3] The retreat of Lopo Soares from Jedda had much injured the prestige of the Portuguese, and, although he had taken and destroyed Zeila, on the Somali coast, on his way back to Hurmuz in 1517, and Saldanha sacked Berbera the next year, there was, according to Correa, a general idea that the Portuguese would not venture to oppose the Turks. It was felt that some action must be taken, and in 1523 an expedition was sent to Massowa, in the Red Sea, to bring back a Portuguese Ambassador who had gone to Abyssinia, but it returned without effecting its purpose.

In 1524 [4] Eitor da Silveira again went into the Red Sea, and also made peace with Aden, the Chief of which expressed his willingness to submit to Portugal; a treaty

[1] Castanheda, iv, 18 and iv, 41.
[2] De Barros, IV, i, 8. 24 f.
[3] De Barros, IV, i, 8, p. 24.
[4] Correa, ii, 780.

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which, however, led to nothing. Next year a Turkish fleet under Raīs Sulaimān again threatened Aden, but was beaten off by Silveira. This fleet and others in the following years made their way across the Indian Ocean to the coast of Gujarāt, where many contests took place with Portuguese vessels.[1] Sulṭan Sulaimān was undoubtedly attracted to India by the state of unrest and disorganization which followed the invasion of Bābur in the north and the collapse of the Bahmanī kingdom in the south. Bābur's great victory at Pānīpat on April 20, 1526, which led to the fall of the Lōdī kingdom of Delhi and the foundation of the Mughal Empire, preceded only by four months Sulaimān's own triumph at Mohacs (on August 28, 1526), which led to the subjection of Hungary to Turkey. At this period Gujarāt stood out as the most wealthy and apparently the strongest among the existing kingdoms of India, and there can be no doubt that Sulaimān regarded a foothold on that coast as a necessary step towards the foundation of an Indian Empire. To effect this it was evidently his policy to form an alliance with Gujarāt for the expulsion of the Portuguese from the Eastern seas; in fact, to carry out with far greater force what had been attempted by the Egyptian fleet in 1509. Negotiations were therefore commenced with any elements which gave the promise of raising a strong Turkish party in India. The Mughal Emperor Humāyūn, who succeeded Bābur in 1530, inherited his ambitions without his extraordinary resolution and energy. One of his principal projects was the conquest of the wealthy region of Gujarāt, and Bahādur Shāh, the king of that country, was willing to obtain support wherever he could, either from Turkey or from the Portuguese. His country had already served as a refuge for malcontents from the Delhi kingdom, among whom was the pretender to the crown, 'Alā-ud-din Lōdī (uncle of the king Ibrāhīm, who had been defeated by Bābur). This man or

[1] De Barros, IV, 1, 8. 27.

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some member of his family found his way to Constantinople,[1] and begged for help, while Bahādur Shāh's emissaries at the same time laid his case before the Sulṭān with very valuable gifts and large sums of money in gold. These applications provided the opportunity he wanted, and he immediately began to fit out a great expedition at Suez. A fleet of sixty-six ships, including twenty-four large galleys and a great number of smaller craft, was constructed and armed with powerful artillery. A force of 20,000 men was embarked, which included 7,000 Janissaries, as the Turkish historian, Hājī Khalīfa, informs us. This fact, alone, shows that conquest by land as well as by sea was contemplated, and there can be little doubt that Sulaimān's intention was to establish his power in India, relying at first on the support of Gujarāt. The whole was under the command of Sulaimān Bāshā, a eunuch of Greek descent, a man of great cunning, known for his cruel and unscrupulous nature. He held the post of Governor of Egypt, and owed his appointment, it was reported, to a harem intrigue. He was over eighty years of age, and inordinately fat, so much so that according to the chroniclers it took four men to lift him from a seat. His appointment to such a responsible post may be regarded as an example of the vicious Turkish system of later days, but can hardly be considered as typical under the usually vigorous administration of Sulaimān the Magnificent. A Portuguese pilot named Alvaro Madeira, who had been taken prisoner by the Arabs at Shiḥr on the coast of Hadhramaut, offered his services as guide, but escaped before the expedition sailed, and found his way to Lisbon, where he exposed the Turkish plans. His information was, however, too late to be of any value to his countrymen in India.

[1] Turkish records (quoted by Hammer-Purgstall) mention one Burhan Beg, "son of Sikandar Lōdī, who had been defeated by Humayun." No such person is mentioned by the Indian historians. Sikandar Lōdī was the father of Ibrāhīm, who was defeated not by Humāyūn but by Bābur, nor is the title Beg borne by Afghāns such as the Lōdīs. In India it denotes Mughal descent. Firishta (Persian text, ii, 222) says that 'Alā-ud-dīn was one of the sons of Bahlōl Shāh, Lōdī.

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The island of Diu had been ceded to the Portuguese by the Sulṭān of Gujarāt, Bahādur Shāh, in 1535, as a bribe to obtain their help against Humāyūn. They also obtained his consent to the erection of a fort on this island, and immediately set to work to construct it, under the orders of the Viceroy Nuno da Cunha. A quarrel afterwards broke out, and in 1536 Bahādur met his death in a sudden and apparently unpremeditated dispute which broke out during a visit to the Portuguese Governor. The succession to his throne was disputed, and in 1538 the nominal ruler was Maḥmūd Shāh, but the army seems to have been under the control of an Italian renegade named Khwāja Ja'afar,[1] who was working in the interest of Mīr 'Ālam Khān, a Lōdī refugee. The Muḥammadan historians give but little information regarding these events, and we are dependent mainly on Portuguese records for what happened after the death of Bahādur Shāh. The defences of the Diu fort had been pushed on, and Khwāja Ja'afar, who had for a time feigned friendship to the Portuguese, suddenly turned against them, having learnt of the Turkish preparations. His troops, consisting of a motley army of Arabs, Turks, Abyssinians, and others, were joined by the army of 'Ālam Khān, and occupied the north shore of the strait which separates the island of Diu from the mainland. This strait was in some places fordable at low water. The Portuguese fort occupied the eastern corner of the island, and the native town with a mercantile population of Muḥammadans and Hindus lay to the west of it.

The first attack was made on the town on June 26, 1538; the Portuguese commander, Antonio da Silveira, was able for a time to hold the straits, but in August he found that his small force was insufficient for this purpose, and he gradually withdrew his artillery into the fort, not without considerable losses. This action was just in time to avoid certain destruction, for the Turkish fleet was approaching. No news

[1] The correct form of this name is uncertain. It may be Ẓafar. The Portuguese historians give it as Sofar.

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had reached Goa, and no reinforcements had been dispatched, but rumours began to come in, and at the end of August a light vessel, known as a *fusta*, or "foist", was sent to Mangalor (or Mangrol), at the west end of the Kathiawar peninsula, to reconnoitre. The captain, Miguel Vaz, caught sight of the great armada, and hurried back with the news that he had seen forty-five galleys and a multitude of smaller vessels. Miguel Vaz was immediately hurried off to give the news at Goa. He was sighted by the approaching enemy, but was able to escape them as there was a break in the monsoon, and the breezes which were sufficient for his light craft were not enough for the Turks. It may be remarked here that the Portuguese were better sailors than the Turks. They were at home in the stormy waters of the Indian Ocean, while the Turks, who had been trained in the Mediterranean, and who relied more on galleys than on sailing ships, often suffered severely during the monsoons.

Sulaimān Bāshā [1] had sailed from Suez on June 22, 1538,

[1] The principal authorities for Sulaimān Bāshā's expedition are the following:—

De Barros, IV, x, chs. 1–11.

Castanheda, viii, chs. 191–7, but history stops short in the middle of the siege.

Faria y Sousa (ed. 1666), i, 354 ff. Do Conto V, iv.

Hājī Khalīfa, *Maritime Wars of the Turks*, O.T.F. trans., p. 65 f., and *History des Guerres Maritimes*, f. 26.

Hammer-Purgstall, *History of the Ottoman Turks*, v, 297 f. (French translation).

Firishta (Persian text, ii, 224–5) and the Mirāt-i-Sikandarī conclude their accounts with the death of Bahādur Shāh, and do not relate the events connected with the Turkish fleet. This applies not only to the translation in Bayley's *History of Gujarāt* but also to the fuller translation by Fazlu'llāh Lutfullāh Farīdī (Bombay, n.d.).

The relation of the Venetian officer who was a prisoner under Sulaimān Bāshā is given in *Ramusio*, i, 274–80 (*Viaggio scritto par un Comito Veneziano*).

These and subsequent events are also dealt with in the introduction to Bittner and Tomaschek's edition of Sidi 'Ali's Mohīt (*Die topographische Capitel des Indischen Seespiegels Mohīt*; by Kapudan Sidi Ali, Kātib-i-Rūmī), Vienna, 1897, and in Sīdī 'Ali's own account of his expedition, *The Mirāt el Mamālik*, which is referred to here in the French version, *Relation des Voyages de Sidi Ali*, Paris, 1827.

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and after a considerable delay at Jedda arrived at Aden, where he again delayed from August 3 till August 19, in order to obtain command of that important port which was under its own Arab chief, Shaykh Ghāzī bin Dāūd. This chief, though unwilling to submit to the Turks, wished to propitiate the commander of this powerful armament, and agreed to his request to send supplies to the fleet and to pay him a visit in person, and at the same time to receive at Aden a number of invalids from the fleet. Sulaimān under this guise landed a large number of soldiers with concealed arms, who, on a pre-concerted signal, seized on the defences of the town and sacked it, while the unfortunate Ghāzī and three other Shaykhs who had accompanied him on board were at the same time hanged on the yardarms of the Bāshā's galley. He then sailed for Diu, leaving a garrison in Aden. This treacherous conduct, which soon became known among the Gujarātīs, did not conduce to good relations between them and the Turks. The fleet arrived off Diu on September 4, 1538. The Turks made a bad beginning, for Sulaimān was unable to conceal his desire to treat Gujarāt as a conquered country. The troops which were landed made a demonstration in front of the Portuguese fort, but also indulged themselves in an orgy of plunder and murder in the town, and spread dismay among their allies. The break in the monsoon came to an end, and the admiral found himself obliged to seek a safer anchorage, which he found (at Muzaffarābād) some twenty miles away. In moving he lost four cargo-boats, which were wrecked, and the munitions of war they contained were scattered along the coast. Among these were a large number of saddles and other equipment for cavalry, which deepened the impression among the Gujarātīs that the expedition was intended for land operations, for cavalry could not be needed for the siege of an island fortress. After about three weeks the fleet was able to return to Diu, and the actual siege began with what was for those days a tremendous bombardment. We are told that nine basilisks were employed throwing shot of from 90 to

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100 lb. weight, and others throwing stone shot of upwards seven palms in circumference, and battering guns which could smash a solid rock. The bombardment was fully developed by October 5, and lasted till November 5. During this time numerous assaults were made without success. The Portuguese had received some small reinforcements, but were nearly at the end of their resources, when to their astonishment the Turkish fleet suddenly sailed away, and they remained undefeated. The events of this siege have been described in great detail, and occupy a prominent position in all modern histories dealing with the history of the Portuguese in India. The Turkish and Indian historians pass over its close in a very summary way, and attribute it to the failure of the Gujarātīs to furnish the fleet with supplies. It is evident, however, that this ambitious scheme ended in absolute failure.

The failure of Firishta and of Sikandar, the author of the Mirāt-i-Sikandarī, to give any account of the Turkish expedition is remarkable, and the reason for it is not easy to detect. Firishta, indeed, in ch. xi of his history gives a short account, which is, as he states, taken entirely from the Tuḥfatu'l-Mujāhidīn, but in its own place under the history of Gujarāt he leaves a blank, as does the Mirāt-i-Sikandarī, the special history of that country. This, combined with the similar omission of the naval battle of 1509 by the same writers, has the appearance of deliberate suppression. The author of the Tuḥfatu'l-Mujāhidīn, however, shows greater honesty and is not afraid to admit a Muḥammadan defeat, although not to be relied on for details. Like Hājī Khalīfa, he attributes the failure of Sulaimān Pasha solely to the want of supplies, and the failure of the Gujarātīs to co-operate, and says nothing about the fighting. He states plainly that the intention of the Sulṭān Sulaimān was not only to drive out the Portuguese but to take possession of the territory himself. In the version of his history given by Firishta (Persian text, ii, 372) he says, "At this time Sulṭān Sulaimān

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bin Sulṭān Salīm Rūmī expressed the desire to expel the Firangīs from the ports of Hind, and to possess himself of these regions."

Sulaimān was in no hurry to show himself to his master; he lingered at Aden and other places on the Arabian coast, and did not reach Jedda till March 13, 1539. He found himself in disgrace at Constantinople, and as he understood that his destruction was certain he put an end to his own life. This failure was decisive. The Portuguese remained in command of the open waters of the Indian Ocean, although the Turks were still strong in the Red Sea, as was shown in 1541, when the Portuguese Viceroy, Estevão da Gama, son of the great admiral, attempted to attack the Turkish naval port of Suez. The expedition led to no valuable result, although, incidentally, it contributed to the preservation of the Christian kingdom of Abyssinia from destruction at the hands of the Muḥammadan tribes of the coast which had been furnished with firearms by the Turks. The quixotic, but heroic, adventure of Christovão da Gama, the Viceroy's brother, in this cause, has been fully dealt with in Mr. Whiteway's *Portuguese Expedition to Abyssinia*. In spite of his defeat, the "Grand Turk", Sulṭān Sulaimān, did not give up his projects of aggrandisement in the East, but the story of the various attempts made only serves to show how decisive the defeat of the Turks had been and how strong was the hold the Portuguese had now obtained over the waters of the Indian Ocean.

Diu was besieged a second time in 1548, but the Turks took no part in this siege, which was carried on entirely by the Indian Musulmāns; it is probable, however, that it was not unconnected with Turkish schemes. Aden had submitted, nominally at least, to the Portuguese after Sulaimān Bāshā's return, and the other parts of Hadhramaut were also under their influence. By 1551 another strong fleet had been fitted out at Suez. It was placed under the command of Pīrī Bey, a distinguished naval commander, and sailed into the Indian Ocean, visiting Aden and Shiḥr and Dhofār, on the

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Hadhramaut coast. He then appeared off Maskat, and finding the Portuguese unprepared he took it without much difficulty, carrying off the Portuguese commandant, João de Lisboa, as a prisoner. He appears, according to the Turkish historians, to have asked his captive for advice, and following this he turned out of the Persian Gulf, after he had plundered some of the islands there but had failed to take Hurmuz. He then heard of the approach of a strong Portuguese fleet under Noronha,[1] and attempting to slip past them was engaged in a disastrous battle. He got away with three galleys only, one of which was wrecked on the Bahrain Islands, and he found his way to the Red Sea with two only. The remainder of the fleet was locked up in the Persian Gulf, and took refuge in the Shatt-u'l'Arab. Katīf, on the Arabian coast of the Gulf, which the Portuguese had taken in 1550, remained in their hands.

The enraged Sulṭān promptly beheaded Pīrī Bey, and sent Murād Bey (who had escaped from Katīf when the Portuguese took it) overland to Basra, with orders to take the fleet out of the river and bring it round to the Red Sea. Murād Bey, anxious to retrieve his reputation, sailed boldly for the Straits of Hurmuz, but the Portuguese fleet, under Diogo de Noronha, was waiting for him there. A desperate fight ensued, in which one of the Portuguese captains, G. P. Marramaque, took a glorious part. Two of the Turkish captains, Sulaimān Raīs and Rejeb Raīs, were killed, and their ships sunk. The remainder of the fleet fled and again took refuge at Basra.

Sulṭān Sulaimān now had to recourse to one of the best-known naval commanders of the time, Sīdī 'Alī, an old Mediterranean warrior, who had served under Khairu'ddīn Barbarossa in the great naval victory of Prevesa, in which the pride of Andrea Doria had been abased. His task was to get the Turkish fleet of fifteen galleys out of the trap in which it

[1] Probably Fernando de Noronha, as the Turkish account says he was son of the Governor. Afonso de Noronha was Governor, and his son Fernando commanded the fleet which fought next year against Sīdī 'Alī.

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was enclosed and to bring it round into the safe waters of the Red Sea. He sailed down the Persian coast, touching the Isle of Khārak, Rī-shahr (now displaced by the more modern Abu-shahr or Bushire), Katīf, the Bahrain Islands, and the Isle of Kishm (which he calls Barokht), and while turning the Cape of Musandam he encountered the Portuguese fleet, under Fernando, son of the Viceroy Afonso de Noronha. The fight which followed was not decisive, and the Turkish ships succeeded in making their way into the open sea, and followed the coast towards Maskat, where the Portuguese fleet seems to have retired to refit. It sailed out on the approach of the Turkish Armada, and a great and decisive battle was fought, which ended in the defeat of the Turkish fleet. Some of their ships were sunk and others driven on to the rocks, and Sīdī 'Alī finally escaped with nine galleys. He describes the fight himself as more terrible than any he had taken part in while fighting against Andrea Doria under the orders of the great Barbarossa. He was forced to abandon his scheme of sailing to the Red Sea, and tried to make for the coast of India, hoping, no doubt, to find safety in the ports of Gujarāt. It was now about the middle of August, 1554, and, as on former occasions, the Turks seem to have selected the monsoon season for their ventures in the Indian Ocean, and their great galleys, depending mainly on rowing power, were not well-fitted to contend with the storms they encountered. The battered fleet was driven to the coast of Mekrān; the rowers were powerless, and they were forced against their will to set sail to avoid being driven on that inhospitable shore. At last some coasting craft guided them to the harbour of Gwādar, where a Baloch Chief expressed his devotion to Sulṭān Sulaimān, the Khalīfa, and was induced to furnish them with some pilots. Noronha's fleet had apparently remained at Maskat, but some ships had left in pursuit of the fugitives, and this had no doubt something to do with the dangerous course pursued by Sīdī 'Alī. The tempest nearly drove him into what he calls the Khor of Jakat, that is the Gulf of Kachh,

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to the north of Jagat Point. Escaping this danger, and keeping away from Diu to avoid being seen by the Portuguese, he found himself at the entrance of the Gulf of Cambay, where the combination of the south-west gales and the dangerous tides nearly proved too much for him. Two of his galleys were pursued by the Portuguese ships, which drove them on to the rocks. The other seven ships at last found themselves at Dāmān, but the Governor of this place, no doubt through fear of the Portuguese, told them that they would be captured if they stayed there, and directed them to Sūrat. Many of the sailors deserted and got ashore to take service in Gujarāt. With the remainder Sīdī 'Alī arrived at Sūrat and was allowed to land there. The ships were blockaded by the Portuguese, who demanded their surrender. This the Gujarātīs would not agree to, but to appease the Portuguese they destroyed the ships. Sīdī 'Alī was left stranded with no means of getting back by sea. His ships were destroyed and his crews had deserted. He met with many expressions of devotion to the Khalīfa, but with no active support. For a time he remained in Gujarāt, taking part in some local wars, and employed his leisure in compiling his great work, the *Muḥīṭ*, or *Ocean*, a guide to the navigation of the Eastern Seas. Finally, he determined to make his way back to Turkey overland. His further adventures do not concern us here, although of great interest in themselves. He travelled through Sindh and Multān to Delhi, and thence through Afghanistan, Bokhara, and Khiva to Persia, and over the Pusht-i-Kūh to Bagdad, where he arrived after about three years' wandering.

The strong position of Turkish soldiers and officials in the kingdom of Gujarāt at this period has a curious light thrown on it by this adventure of Sīdī 'Alī. He was sure of a reception at Sūrat, although other ports refused him hospitality, for the reason that it had a Turkish Governor who had himself fortified it in the Turkish fashion, and armed it with Turkish guns, which he had transported from the fort of Junāgarh. These guns were known as "Sulaimānī". The history of this

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Governor may be pieced together from various incidental mentions by Firishta, and in the Mirāt-i-Sikandarī. The original name of the Governor was Ghazanfar 'Aḳā, a Turkish Ghulām of Sulṭān Maḥmūd Shāh. He built the fort, according to Firishta, in 949 H. (A.D. 1542) (Firishta's text, ii, 226). He was then given the title of Khudāwand Khān, and made Governor of Sūrat. Briggs (iv, 147) gives his name as Suffy Aghā, and his title as Khudābanda Khān. In the Mirāt-i-Sikandarī, where he is mentioned several times, he also bears the name of Khudāwand Khān. He is said there to have owed his position at Sūrat to another Ghulām, who had risen to a high position, 'Imādu'l-Mulk Rūmī, also a Turk, though not an Ottoman Turk. He had married Khudāwand Khān's sister, and in the various distributions of appointments which the leading men made in these disturbed times he is said to have appointed his brother-in-law to be Governor of Sūrat (Mirāt-i-Sikandarī, p. 270). In the year 952 (1545) we are told that he acted as executioner of the celebrated noble, Malik 'Imādu'l-Mulk (not to be confounded with 'Imādu'l-Mulk Rūmi), whom he killed after torturing him. The Mirāt here (ib. 235–6) calls him the fief-holder of Sūrat. Still later, in 933 H. (1559), Khudāwand Khān was accused of oppression by the people of Sūrat, who complained to his brother-in-law, 'Imādu'l-Mulk Rūmi. He defied 'Imādu'l-Mulk, who laid siege to Sūrat. Khudāwand Khan finally induced 'Imādu'l-Mulk to visit him under the pretext of negotiation, and treacherously killed him. Changīz Khān, son of 'Imādu'l-Mulk, carried on the attack, and obtained Portuguese assistance by ceding to them Dāmān and Sanjān. The Portuguese fleet blockaded Sūrat, and Khudāwand Khān, in a sortie, was killed by Changīz Khān. There appears to have been a man named Khudāwand Khān, who Firishta (l.c.) says was killed by Burhān at the same time as Maḥmūd Shāh in 961 (1554), and the Mirāt (p. 238) speaks of a Khudāwand Khān Rūmī who was killed at Diu, but it seems clear that one man bearing this title was Governor of

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Sūrat till 1559, and that he was the original Turkish Ghulām who built the fort. Evidently he was the Governor when Sīdī 'Alī landed there, and it was through his influence that Sīdī 'Alī remained there so long unmolested in spite of Portuguese pressure. This perhaps explains the Portuguese willingness to help Changīz Khān against Khudāwand Khān.

Thus ingloriously ended the last organized effort of the Turks against the Portuguese naval power.

Sulṭān Sulaimān, the greatest of Turkish rulers, abstained from any further attempt to drive the enemies of Islam from the Arabian Sea, although many isolated combats took place. He died in 1566.[1] It was not till the year 1580, in the time of Sulaimān's grandson, Murād III, that a renewal of the struggle took place. It was, however, local, being entirely confined to the coast of East Africa. The occasion may have seemed to the Turks a favourable one, for Portugal was at this time distracted by the dissensions which followed the death of the Cardinal King, Henry, which occurred only a year and a half after his succession to the heroic and romantic Dom Sebastião. The Turkish Empire was, however, not in a position to take full advantage of its opportunities. It had

[1] At this period, while the brave but unfortunate king Dom Sebastião was still reigning in Portugal, it seems that a project of carrying the war into the Persian Gulf and driving the Turks out of Basra had been discussed. The historian Diogo do Couto, in his *Soldado Pratico* (a series of dialogues between a Viceroy lately appointed to India and an old soldier on affairs connected with the Eastern relations of Portugal), alludes to this project. The Viceroy asks the soldier's opinion on the question, and the latter condemns the project, evidently giving expression to Do Couto's own opinion. He thought they might succeed in taking Basra, but could not hold it against the great military power the Turks would be able to bring against it, and that it would be better to concentrate on strengthening Hurmuz and keeping it well supplied so that it would be able to resist all attacks. This was good advice, for the Portuguese could only dispose of a small land force quite incapable of resisting the powerful armaments of the Turks; their strength was on the sea and not on land. Such councils appear to have prevailed, for the expedition was never undertaken.

Dialogo do Soldado Pratico, Lisbon, Acad. Real das Sciencias per Diogo do Couto, 1790.

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rapidly deteriorated since Sulaimān's death, and though still outwardly strong, was eaten up by corruption. The attack on the Portuguese seems to have been the work of one man, 'Alī Beg, who was sent out by the Albanian Wālī of Yemen. It is doubtful whether it was ordered or inspired from Constantinople, and it does not seem to have been mentioned by any Turkish historians. All our information is derived from Portuguese sources.[1] 'Alī Beg's first exploit was a raid against Maskat in 1580. The town was at that time unfortified, for the celebrated fort which still exists was not begun till six years later, and it fell an easy prey to the raider, as it had to Pīrī Bey in 1553. Though this raid led to no permanent result, it gave 'Alī Beg a great reputation, and in 1584 the Wālī sent him out of the straits to go down the coast of East Africa and obtain timber for the Red Sea fleet at Malindi. He was furnished with two galleys, but one of them was unseaworthy, and had to return at once. He proceeded with the other, and as he went he got together a number of coasting craft manned by the local Arabs. He proclaimed that a great fleet was following him to expel the Portuguese from the whole coast, and this bluff, taken together with the manifest weakness of the Portuguese, gained him much support among the coast Arabs. Mogadoxo, Brava, the Lamu Islands, and Mombasa declared in his favour, and Malindi, where there was a Portuguese captain in charge, alone held out. Meanwhile, a badly organized Portuguese fleet had entered the Red Sea, but effected nothing, as it was not even able to capture 'Alī Beg's galley on its return journey with its prize, a Portuguese ship, which had been taken. The Arabs who had declared in favour of the Turks continued to defy the Portuguese, and in 1589 the Wālī sent out 'Alī Beg a second time with a better equipped expedition, consisting of four galleys and the ship captured in the first attempt. Had the Turkish rulers now been in a position to send out a strong fleet they might possibly

[1] The only full account is that given by De Couto, Decadas, ed. 1788, Dec. X, bk. vii, chs. 7, 8; Dec. XI, chs. 5–15.

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have overthrown the Portuguese naval power. This was the year following the defeat of the great Armada, in which the greater part of the Portuguese fleet had perished, and the English seamen were now on the watch for all Spanish and Portuguese vessels coming from the East, as Linschoten has vividly described. He himself, travelling from India in a Portuguese ship this same year, 1589, was held up in the Azores, and had to spend three years there before he could reach Lisbon. But Turkey was not ready, and the opportunity passed. 'Alī Beg was received with enthusiasm by all the Arabs who had declared for Turkey, but, as before, Malindi defied him. 'Alī Beg grounded on a sandbank and was bombarded by the Portuguese. He got away to Mombasa, intending to fortify himself there.

The local commandant, on hearing of his approach, had dispatched a swift sailing vessel to the Viceroy at Goa, with the news. The latter was a man of energy, and at once sent off his brother Thomé de Souza Coutinho with all the ships he could muster. The fleet arrived on the coast of Brava, and following it to the south by the Lamu Archipelago received news that the Turks were at Malindi. He found on arriving there that they had gone to Mombasa. The fleet arrived at the entry of the port on March 5, 1589. The fight which followed ended in the destruction of the Turkish fleet and the capture of the fort which they had occupied. Many Turks who took refuge on the mainland were killed and devoured by a cannibal Bantu tribe, known to the Portuguese as the Zimbas, who had for some years been spreading desolation along the African coast from the Zambezi northwards. This completed the Turkish discomfiture. 'Alī Beg himself surrendered. He was taken to Lisbon, and is said to have become a Christian. Possibly like many other Turkish sailors he was of European origin.

Thus the last attempt of the Turks to assert their authority in the Indian Ocean ended in failure, as the others had done. Coutinho's brilliant exploit left the Portuguese for the time in

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command of those seas. They had won the victory for Europe; the sea-route was established, and all serious opposition was disposed of. Yet though they had laboured others were to enter into their labours. The accession of a Spanish king to the throne of Portugal had entangled Portugal in the schemes and the wars of Spain. England and Holland perforce became her enemies, and when after the "sixty years' captivity" she recovered her liberty, only the shadow of her Eastern Empire remained to her. The Dutch had taken the greatest part of it, and the trade of India proper was passing into the hands of other nations. It is not my object here to follow the history of the decline of the Portuguese power, but I hope that sufficient has been told to make clear the nature of the task Portugal undertook. It was a single-handed struggle of a small nation against the greatest military power then existing, one which threatened to dominate both Europe and Asia. Portugal was victorious, but exhausted, and the nations of Europe should not now be unmindful of the great part she played.

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The Honan Relics: a New Investigator and some Results

By L. C. HOPKINS

IT is a genuine pleasure to report the accession of another Chinese critic and investigator of the Shang dynasty writing, in the person of Mr. Wang Kuo-wei 王國維, of Hai-ning Chou 海寧州, in the Central Chinese Province of Chehkiang.

I propose to lay before the readers of the Journal one or two of the more interesting results of his decipherments, together with a few notes of my own upon these.

The particular collection of inscribed bone fragments which forms the subject of Mr. Wang's researches is to be found at Shanghai in the Chien Shou T'ang building 戩壽堂. By the admirable generosity of Mr. and Mrs. Hardoon of that treaty port, facsimile reproductions of the collection have appeared in Nos. 13–15 of the *I Shu Ts'ung Pien* magazine, which render the material available for study in any part of the world. I very gladly take the present opportunity of expressing the warmest appreciation of the great boon conferred on Far Eastern research by the financial assistance volunteered by Mr. and Mrs. Hardoon towards the publication of these difficult but invaluable historical documents.

Mr. Wang Kuo-wei is a coadjutor—and a notable one—of the now well-known antiquarian Mr. Lo Chên-yü, and his present enterprise comprises the transcription into modern Chinese—so far as this is yet possible—of all the inscriptions in the above collection, and a comment accompanying them in the form of annotations, historical and epigraphic. It is from this commentary I have drawn in the present article.

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First of all I would call attention to a discovery that would have greatly pleased the late Edouard Chavannes had he lived to read it and to weigh the arguments by which Mr. Wang supports it. This discovery is briefly as follows. Ssŭ-ma Ch'ien has enumerated the names of thirteen ancestors of the line that produced the culminating personality of T'ang the Victorious—the founder of the Shang Dynasty. Wang Kuo-wei believes himself to have identified from the inscriptions on the Honan relics no fewer than eight of these personages. The earliest is T'u, 土, representing the Hsiang T'u 相土 of the *Historical Memoirs*; next comes the great-great-grandson of the latter, styled in the *Memoirs* Chên 振, but identified by Wang, upon grounds that must be left undiscussed here, as the Wang Hai 王亥 frequently noted on the Bones; then Wei, otherwise called Shang-chia 上甲, and then a complete sequence of the five predecessors of Ch'êng T'ang, T'ang the Victorious, always designated on these relics as Ta I, 大乙, and not T'ien I, 天乙, as in the *Historical Memoirs*.

Incidentally, the elucidations of the Chinese scholar upon these points constitute a gratifying confirmation of my own conjecture published in the Journal for January, 1917, pp. 83–4, that the "combinations, each consisting of a symbol closely resembling the half of a square bracket [ ] enveloping, respectively, the characters Ting, I, and Ping, . . . are really the Pao Ting, Pao I, and Pao Ping of the *Historical Memoirs*". More than two years later Wang's similar identification appeared on p. 3 of No. 16 of the antiquarian journal *I Shu Ts'ung Pien*, dated the 2nd month of the 8th year of the Republic, viz. March, 1919, but it seems most improbable that Mr. Wang should have had any knowledge of my article. We had accordingly reached the same conclusion independently.

By what may not unfairly be called a flash of genius, working through the singularly powerful Chinese memory,

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Wang has successfully reconstructed in one piece two bone fragments which do not even belong to the same collection. One of these is shown as the 10th example on p. 1 of the illustrated catalogue of the above-mentioned Chien Shou T'ang cabinet, edited by himself[1]; the other is the 14th on p. 8 of Lo Chên-yü's *Yin Hsü Shu Ch'i, Hou Pien*.[2] Wang points out that the style of the writing and the size of the characters on these two fragments are identical, and that the two edges of the fracture fit each other exactly.

When thus adjusted the two pieces reveal a continuous text, which may possibly have originally included one or two more names below. I give in the modern form Wang's reading of this important inscription, and in Fig. 1 of the Plate a facsimile copy of the reconstituted original—乙未酒系品甲十報乙三報丙三報丁三亦壬三亦癸三大丁十大甲十 (here follows broken edge of bone). Before adding a translation, I may explain that the 3rd and 5th characters are held, no doubt correctly, by Lo Chên-yü to be the names of special sacrifices; probably, therefore, the 4th is so too. The numerals "ten" and "three" must indicate victims or things offered in worship. "On the day *i wei* to offer at the *chiu* and *hsi* and *p'in* sacrifices, to [Shang] Chia ten, to Pao I three, to Pao Ping three, to Pao Ting three, to Shih Jên three, to Shih Kuei three, to Ta Ting ten, to Ta Chia ten."

Several points in this legend at once demand notice. Provisionally accepting Wang Kuo-wei's equation of the 6th character as 甲 *chia*, and that it stands for the full form elsewhere 上甲 Shang-chia, who was otherwise named Wei 微, we find that as Wang (and myself

[1] See the *I Shu Ts'ung Pien* 藝術叢編, No. 13, p. 1, verso, left-hand lower corner.

[2] See ibid., No. 1, p. 8, verso, left-hand upper corner.

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previously) points out, the three names I, Ping, and Ting (乙, 丙, and 丁), each within a half square bracket, are the Pao I, Pao Ping, and Pao Ting of the *Historical Memoirs*, while, as Lo Chên-yü had already discovered, our Shih Jên and Shih Kuei are the Chu Jên and Chu Kuei of the same work. But Wang rightly draws attention to the slight discrepancy in the order of the three Paos between this inscription and the *Memoirs*. In the latter the succession is Ting, I, Ping. Here it is I, Ping, Ting. As between this very ancient original document and the *Memoirs* we cannot doubt that it is to the former we should give our trust.

A further noticeable feature in this list of what Wang calls the six *hsien kung* 先公, or "ducal predecessors" of the Shang dynasty, is, that as now restored they correspond precisely to the order of the "Ten Stems" or "Ten Days", as Wang names them, save that four, the 5th, 6th, 7th, and 8th, are missing. Thus Shang Chia heads the series, followed in due order by I, Ping, and Ting, and the 9th and 10th end, as they should do, in Jên and Kuei. Hence, concludes Wang, the hitherto supposed rule of the Shang that deceased ancestors were known by the name of the day on which they were born, was probably a custom only instituted after the date of T'ang the Victorious, and was due to the fact that by his time the days of the births and deaths of his ancestral predecessors were already out of memory, and hence recourse was had to the sequence of the Ten Days to provide them with retrospective names, otherwise such a coincidence as the facts now show would be impossible, 故即用十日之次以追名之否則不應如是巧合也.

This is certainly a cogent argument, but though the point is passed over by Wang it implies that a lacuna of four successors, corresponding to Wu, Chi, Kêng, and Hsin of the "Ten Days", occurs in the record, both in these relics and in the *Historical Memoirs*. Otherwise the Shih

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Jên and Shih Kuei (alias Chu Jên and Chu Kuei) should have been styled Chu Wu and Chu Chi. Were there then four ducal ancestors not in the direct chain of descent by generations, and consequently not qualified to be included in the family sacrifices?

And this brings us to another curious point, which Wang Kuo-wei does not pass over. In the list of Shang rulers above given in original and translation there is one omission which is most unlooked for, that of Ta I 大乙, as T'ang the Victorious is always styled on the Honan relics, and less striking, the two sovereigns, Wai Ping 外丙 (Pu Ping 卜丙 on the Bones) and Chung Jên 仲壬 are also absent. Why are these three sovereigns, and particularly why is T'ang, not found? Wang essays to explain, and for the two less renowned rulers, I think, with success. But the matter is less clear, it seems to me, as regards T'ang.

We know from Ssŭ-ma Ch'ien that Wai Ping and Chung Jên were both younger brothers of T'ai Ting, the son and heir of T'ang, though T'ai Ting is declared to have died before ascending the throne.

But it is of importance to bear in mind that these inscriptions are not full records of the royal succession of the Shang dynasty, but the enumeration of those links in the catenary line of generations in family descent to whom certain ancestral worship and sacrifice must be duly offered. Hence it follows that the mention of Ta Ting does not prove that he actually reigned, nor conversely does the omission of the names of Wai Ping and Chung Jên disprove their claim to have been dynastic sovereigns. What the present recovered list of names does show is who were and who were not recognized as entitled to share in certain celebrations of the ruling family's ancestral worship.

Wang Kuo-wei's explanation is, in his own words, as follows: 大丁之後不數外丙中壬者以外丙

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中壬非後世殷天子之所自出故也, that is, "The reason why after Ta Ting, Wai Ping, and Chung Jên are not enumerated, is that they were not later generations in the line whence the Yin dynasty Sons of Heaven had sprung."

"Not later generations," that is the point. Being brothers of Ta Ting they were of the same generation as he, and consequently not entitled to the same sacrifices.

But the omission of Ta I, that is Ch'êng T'ang, seems much harder to account for, nor do I find Wang Kuo-wei's explanation easy to accept, or, indeed, to follow. He says, "The reason why Ta I is not enumerated is that he being the Founder of the Dynasty, his ducal and princely predecessors were perhaps all joined in sacrifice with the Founder," 大乙爲太祖先公先王或均合食於太祖故也. Perhaps so, but how does that explain the omission of the Founder's name?

However, despite these dubieties of detail, the net result of Wang Kuo-wei's brilliant perspicacity is that Ssŭ-ma Ch'ien's *Historical Memoirs* have been suddenly confirmed in particulars where confirmation would have been prima facie regarded as almost infinitely unlikely. And here I must leave Wang's comments on this curious discovery.

. . . . . .

Between that fragment of recovered history and the palæographic riddle which the same scholarly critic has solved, as we are now about to see, there exists a link in the character 甲 *chia*. It forms the liaison between the two discussions, the one historical, the other decipherative.

A formula that we meet with some frequency upon the Honan relics is represented in facsimile in Fig. 2 of the Plate, and *appears* to correspond in modern Chinese writing to the following text: 自一田至于多毓衣 *tzŭ i t'ien chih yü to yü i*. Sometimes either 一 *i* or 于 *yü* is omitted, sometimes both.

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The rendering of this text would be, word for word, "From one field as-far-as to many rearings clothing." Obviously this is nonsense, and the inquirer has a choice between treating "one field" and "many rearings" as place-names or as personal names. Lo Chên-yü had accordingly inserted *To yü* ("many rearings") in his list of the latter. He also had determined, no doubt correctly, that 衣 *i*, usually meaning clothing, is one of the many designations of special sacrifices (and I venture to surmise that it here corresponds to the modern 裔 *i*, posterity), but there matters stopped for years, except that Lo had reached the further conclusion that the supposed *t'ien* 田 was in reality some other but unknown character.

For myself I had advanced some timid steps beyond this, but only in conjecture. I find a MS. note under the character 甲 *chia*, "Can the unknown 田 be this? If so, 田 = 上甲 the Shang ancestor." This was written long before I had seen Wang's notes on the subject, but a private surmise is one thing and a published decision is another. Wang's identification will be found on p. 3 of No. 16 of the *I Shu Ts'ung Pien*. The passage commences 田者上甲也, that is, "田 is Shang-chia." Proceeding to extract from the *Lu Yü* 魯語 division of the *Kuo Yü*, a couple of sentences to the effect that "Shang-chia Wei successfully followed the lead of Hsieh [the original ancestor of the Shang family], and the men of Shang rendered him the sacrifice of requital".[1] Wei's style was sometimes written 田, adds Wang, who then points out the distinction between this last character when correctly written and the character 田 *t'ien*, in the phrase 田狩 *t'ien shou*, to hunt [田 is also the ordinary word for fields]. In 田 *t'ien* the horizontal and vertical strokes both unite with the

[1] 上甲微能帥契者也商人報焉. A note on the text explains that 報 *pao* is the 報德之祭也 sacrifice in requital of goodness.

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perimeter, whereas in the closely similar character used for a personal name [viz. the old form of 甲 *chia*] these strokes are, as a rule, not continued to the bounding lines, a clear distinction between the two signs being thus afforded, though Wang correctly enough adds that frequently this distinction is not observed. The cross thus enclosed is, he says, the ancient character 甲 *chia*, found equally on the Bones and on Bronzes. Next he adduces the *Shuo Wen's* Lesser Seal form, see Fig. 3, and compares it with one occurring on an inscribed tally of Ts'in dynasty date, see Fig. 4, where the cross is still visible, and is, he considers, likewise the early sign 甲 *chia*, the curving caps in both being, in his words, 囗之譌變也, "erroneous alterations of 囗 *wei*."

Wang now proceeds to another point. "In the oracular sentences," he writes, "other examples of 甲 *chia* are always written 十. In the 甲 *chia* of Shang-chia alone we find the form 田. And the names Pao I, Pao Ping, and Pao Ting are written" as in Figs. 5, 6, and 7. "The 甲 [viz. 十] within the 囗 *wei* is analogous with the 乙 *i*, 丙 *ping*, and 丁 *ting* within the square bracket. But *why* they are composed with 囗 and the square bracket we cannot tell. With regard to the form 囧 having the additional 一 above, this is the same as 二, the ancient shape of 上 *shang* above. In the oracular sentences the group," illustrated in Fig. 8, "sometimes occurs, and this is contracted to 囧 in the same way as the characters 帝 *ti* and 示 *shih*, etc., which were composed with [the ancient scriptions of] 上 *shang*, have the latter sometimes in the form 二, sometimes in 一." And Wang concludes, after some further observations upon the stages of his investigation, "that they constitute an iron proof (as he phrases it) that 田 and 囧 are 上甲 *shang chia*."

There are two or three minor points in the foregoing on which I differ from this ingenious scholar, especially his

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apparent view that the single character 甲 is also to be read *shang chia*, whereas surely it can only be 甲 *chia* simply. But his main thesis seems indisputable.

So then we must revise our rendering once more, and we shall now read, "From Shang-chia down to Many Rearings sacrifice will be offered."

But this still leaves the obscurity of the words *to yü*, "Many Rearings," to be cleared up. Who was he, or who were they?

It is here that Wang Kuo-wei comes to our rescue with a really brilliant flash of intuition. The arguments by which he demonstrates the truth of his discovery must be laid before the reader in full, but it will be convenient, before doing so, to state at once the net result. This result is that the two characters which I have transliterated *to yü* are, in these texts, actually 多后 *to hou*, and mean "(his) many successors". So that we have, as our final rendering of the original sentence, this: "From Shang-chia down to his many successors, sacrifice will be offered." This, of course, gives a completely intelligible and satisfactory explanation, if the reading as 后 *hou* can be vindicated. It will be well, therefore, to follow the course of Wang Kuo-wei's own demonstration, which will be found on pp. 8–9 of No. 16 of the *I Shu Ts'ung Pien*. This is occasioned by a short text in the collection he was engaged in deciphering and annotating, which, except for three words, need not concern us now. A copy of these, made from the photographic reproduction on p. 3 of No. 13 of the same Chinese Review, is shown in Fig. 9 of the Plate, and is deciphered by Wang as 后祖乙, Hou Tsu I.

The decipherer opens with the statement that 后與後通, that is, "后 *hou* is interchangeable with 後 *hou*." There is nothing new in that, and it need not detain us, nor need we linger over the passage immediately ensuing as to the identity of this sovereign, Hou Tsu I, in the dynastic list.

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But what follows is arresting. "I find," says the writer, "that in the oracular sentences the variants of the character 后 *hou* are numerous. Sometimes it appears as Fig. 10, sometimes as Fig. 11, sometimes as Fig. 12 or Fig. 13, sometimes as Fig. 14, sometimes as Fig. 15." To which let me add from my own collection a still more striking instance for his argument, seen in Fig. 16.

"All these characters," he continues, "are composed of 女 *nü*, woman, and 𠫓, the figure of a child, 子 *tzŭ*, inverted, being the *Shuo Wen's* character 𠫔 or 𡈼 *t'u* [so, according to Chinese authority, but not found as an independent character]; sometimes with 母 *mu*, mother, replacing 女 *nü*. They depict childbirth 象產子之形. The groups of two or of three dots depict the amniotic fluid at the moment of birth, 象產子時之有水液也. Sometimes the character is formed with 𠂉, analogous in function with *mu*, mother, and *nü*, woman."

Strictly this last figure is a slightly altered scription of 人 *jén*, man, and has usually survived in the *li* or modern script as 尸 *shih*, corpse.

"Accordingly," adds Wang, "speaking as regards the *form* of the character, this is the *Shuo Wen's* 'occasional variant' (或體 *huo t'i*) 毓 of the character 育 *yü*, to rear, produce, the former being composed with 每 *mei*, viz. 母 *mu* [for these are mere variants] and 𡈼, the inverted ancient shape of 子 *tzŭ*, son, and corresponding exactly to these [Bone] forms. Accordingly the act of childbirth is the original significance of this character." (The significance of the character, let us note in passing, not the meaning of the word.)

So far so good. The analysis of the character shows the outline of the mother, and below her the infant at delivery appearing in the natural or normal head presentation, while the dots represented above, at the side of or below it, symbolize the amniotic fluid. And

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here I may perhaps suggest a truer view of the element 𠫓, usually believed after the *Shuo Wen* to represent the character 子 *tzŭ* inverted, and exhibiting the hair of the new-born babe. But the hair at that time is not so marked a feature that it is likely to have been specially indicated, and Figs. 14 and 16 seem rather to point to the amniotic liquid as the real origin of the three strokes at the foot of 𠫓.

And now returning to the main subject, all the foregoing refers to a variant of the character 育, the spoken word corresponding to which is *yü*, not *hou*. How, then, does Wang Kuo-wei account for this discrepancy? "Furthermore," he proceeds, and we are reaching the vital links of his argument, "the figures," Nos. 17, 18, and 19, "all depict an inverted child behind a person," 皆象倒子在人後. He uses the odd words *tsai jĕn hou*, and not *tsai jĕn hsia*, "beneath a person," because his argument requires the word "behind", and continues: "Hence, by extension of meaning, was developed the sense of the word 'after, later, posterior', in the phrase 先後 *hsien hou*, earlier and later, before and after, anterior and posterior. And by a further extension was evolved the sense of 'successor', or 'Prince who continues the body', 繼體君也. The *Shuo Wen's* entry under 后 *hou* is, 'A prince who continues the body. Depicts a human figure. [The wise prince, 后 *hou*] distributes his commands and thus informs the Four Quarters [a quotation from the *I King*]. Hence the element 厂 *i* [*sic*] is composed with 一 *i*, one, and 口 *k'ou*, mouth.'" The meaning of this sentence of the *Shuo Wen's* text as it now stands, being obscure and inconsistent, I have made shift with the English rendering as well as I could. Tuan Yü-ts'ai says the text has been garbled and added to.

Wang Kuo-wei now resumes his own explanatory comments. "Thus, the character 后 *hou*, originally depicting the human figure, the element 厂 should be an

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erroneous alteration of 𠂇 [viz. 尸 *shih*, a modification of the character 人 *jên*, man], while 一 口 are also an erroneous alteration of the figure of an inverted child [viz. of 𠫓]."

This reconstruction of 后 *hou* from Fig. 19 is very attractive, and to me convincing, all the more so as no other example of the character of older date than the Han dynasty can be brought forward in competition.

The argument now proceeds, "The constructive significance of the character 后 *hou* having originally followed that of 毓 *yü*, to rear, produce, in the course of development the later form of the sign for childbirth was specialized in the two shapes 毓 and 育 *yü*, while the character for the word *hou*, Prince Successor of the Blood, was specialized in the shape 𠫓, whereupon two characters had been created,[1] and by a further erroneous change the latter form became 后 *hou*, while for the syllable *hou*, in the expression 先後 *hsien hou*, before and after, a further and separate type was used [viz. one constructed of quite other graphic elements]. The *Shuo Wen* then entered these forms under three different radicals [viz. under its 528th, 335th, and 34th], but the fact is that the three characters 毓, 後, and 后 were originally one character, 其實毓後后三字本一字也." [I have translated this literally, rendering 字 *tzŭ* by "character" in both instances. But in that form it is not true, nor is it what Wang really wishes to say. If we rendered 字 by "word" in each case, the statement would be true, but would not adequately convey what the writer did wish to say. This is clearly that three now different characters, two of which are derived from the same original graphic type, while one, 後, is not, all

[1] 引申其後產子之字專用毓育二形繼體君之字專用𠫓形遂成二字.

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represent the same original word *hou*, meaning "after, later, successor". The translation given above is therefore faithful to the words and false to the intention of the writer. But such a result is inevitable if Chinese scholars will not learn to distinguish between things so vitally unlike as written characters and spoken words.]

We need not here follow Wang in the succeeding paragraphs, in which he seeks to identify the 后祖乙, Hou Tsu I, or "Later ancestor I", with the Shang sovereign 武乙 Wu I. But afterwards he resumes, "In the oracular sentences the character 后 [viz. that shown in Figs. 10 to 15 of the Plate] is also used for the word Hou, Prince Successor of the Blood. There frequently occurs the sentence 自上甲至于多后, 'From Shang-chia down to his many successors.' And, again, 丁丑之于五后, 'On the day *ting ch'ou* approached with offerings the Five Sovereigns (or Princely Successors)'" [see *Yin Hsü Shu Ch'i K'ao Shih*, vol. i, p. 30]. Wang then corroborates these uses of 后 *hou* from the *Book of History* and the *Odes*, and concludes his argument by the statement, "Thus the men of Shang designated their forebears as 后 *hou*. Hence the expression 多后 *to hou* is similar to the expressions 多子 *to tzŭ*, the numerous children, 多士 *to shih*, the numerous officers, and 多方 *to fang*, the numerous regions, that occur in the *Book of History*. And the expression 五后 *wu hou*, the Five Princes, resembles the passage in the *Odes*, 三后在天, *san hou tsai t'ien*, 'The Three Princes were in Heaven,' and that in the *Book of History*, 三后成攻, *san hou ch'êng kung*, 'When the Three Princes had accomplished their work.' These passages are now adduced as equivalents in their significance, through their connexion with the *hou* of the phrase *hsien hou* 先後, earlier and later, predecessors and successors."

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In the foregoing masterly little essay (so it seems to me), there are two points passed over in a regrettable silence by the Chinese scholar. One is that he ignores the fact that at some period there must have been a transfer of the character 毓 from the word *hou* to the word *yü*, to rear, to which it was already attached at any rate at the date of the *Shuo Wen*. The second is his silence on another fact recorded in Kanghsi's Dictionary, namely, that the characters for this syllable *yü*, to rear, have also an exceptional sound *chou* 胄, together with the special sense of 胤 *yin*, descendants, successors. What bearing has this exceptional sound and sense of 育 on the group of facts discussed above? The sense accords with that of 后 or 後 *hou*, but the sound is irreconcilable with the sound of either *hou* or *yü*, and could not have had a common phonetic parentage with either. Yet there would seem to be some unexplained relation.

But apart from these matters of detail, Wang Kuo-wei's researches have been most fruitful. Let me summarize what he has brought to light on this topic alone.

In the first place he has deciphered and made fully intelligible a hitherto inscrutable text frequently recurring.

2. In doing so, he has determined a new variant of the character 上 *shang*, identical in its abraded shape with 一 *i*, one.

3. He has also identified a sign sometimes not to be distinguished from, and always suggesting, the character 田 *t'ien*, fields, and to hunt, with the well-known character 甲 *chia*, as to which I shall have something to say later.

4. He has discovered that a sign which, according to the *Shuo Wen*, is a variant of 育 *yü*, to rear, was in Shang-times the written form of the word *hou*, after, later, successors; and

5. He has disclosed the true pictographic origin of the character 后 *hou*, and shown the stages by which the present misleading graphic wreck was reached.

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To a fellow-ploughman in the stiff and stubborn clay of Chinese palæography these successes perhaps appear more signal than they may to other people, but in any case they well deserve to be made known to Occidental students.

There are a few supplementary observations that I should like, in conclusion, to put on record in connexion with these decipherments of Mr. Wang Kuo-wei.

The latter, in his equation of the apparent 田 *t'ien* character with what is now written 甲 *chia*, has offered no suggestion as to its constructive significance. I propose to do so now.

I believe the designer of the earliest character for the word *chia* drew a crude outline of a hide cuirass, which, as Laufer has described at length in his *Chinese Clay Figures*, p. 174 et seq., "was a cuirass made in imitation of a coat." There exists a variant of the character, seemingly unknown to either Lo Chên-yü or Wang Kuo-wei, several examples of which occur in my collection, one, H. 227, figured in the Plate, Fig. 20, being Shang-chia. This may perhaps be regarded as a transition form between the cross-in-a-rectangle variants and the figure—earlier in type, if not in time—about to be described, the original of which appears on a bronze styled the Ch'ü I 豦彝, with an inscription reproduced in facsimile in the *Chün Ku Lu Chin Wên*, vol. vii, p. 16. The character stands second in Fig. 21 of the Plate. This passage Wu Shih-fên, the author of the above work, transcribed as 錫衮冕干戈, *tz'ŭ* [*sic*] *kun mien kan ko*, "(I) bestow on you the robe and cap of ceremony and the shield and halberd." But a later and very sound critic, Sun I-jang 孫詒讓, in his *Ku Chou Shih I* 古籀拾遺, pt. 中, p. 17, has proposed an admirable emendation, much approved by some subsequent scholars, by reading 甲冑 *chia chou*, "cuirass and helmet," in place of "robe and cap of

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ceremony", a change which conforms better to the form of the characters and the spirit of the text. Sun analyses the second character as from 衣 *i*, clothing, and the contained T-shaped element which he considers to be 甲 *chia* contracted. If that be so, the sign would correspond to the modern character 袷, read both *chia* and *hsia*, a jacket, rather than to 甲 alone. The relationship of form between this example from the Ch'ü I Bronze and the cross-in-a-rectangle compound of the Bones is not altogether clear. Can it be that whereas the old scription of 衣 *i*, clothing, shows the two sleeves, the ancient corslet or cuirass was made like a waistcoat, and being sleeveless was represented by a simple diamond-shaped or oval outline?

However this may be, it seems tolerably certain that the ancient pictographic form of 甲 *chia* was modelled upon a cuirass or corslet rather than upon a flower-bud, as the author of the *Shuo Wen* asserts in the statement that the character *chia*, Fig. 3, 從木戴孚甲之象也, "is composed with wood capped with the figure of a bud-scale." And strong confirmation of the corslet view is furnished by the character 戎 *jung*, arms, military equipment. The Lesser Seal of this is Fig. 22, composed of the two elements 戈 *ko*, halberd, and 甲 *chia*, cuirass. As neither of these elements can be used as a phonetic in a character pronounced *jung*, it is obvious that they are both present for their ideographic value, and in that capacity they serve very appropriately, whereas the combination of *halberd* and *flower-bud* is meaningless.

Here we must stop, but it is to be hoped that we have not heard the last of Wang Kuo-wei's revelations. Meantime, more insight to his penetrating eye; more power to his hermeneutic elbow!

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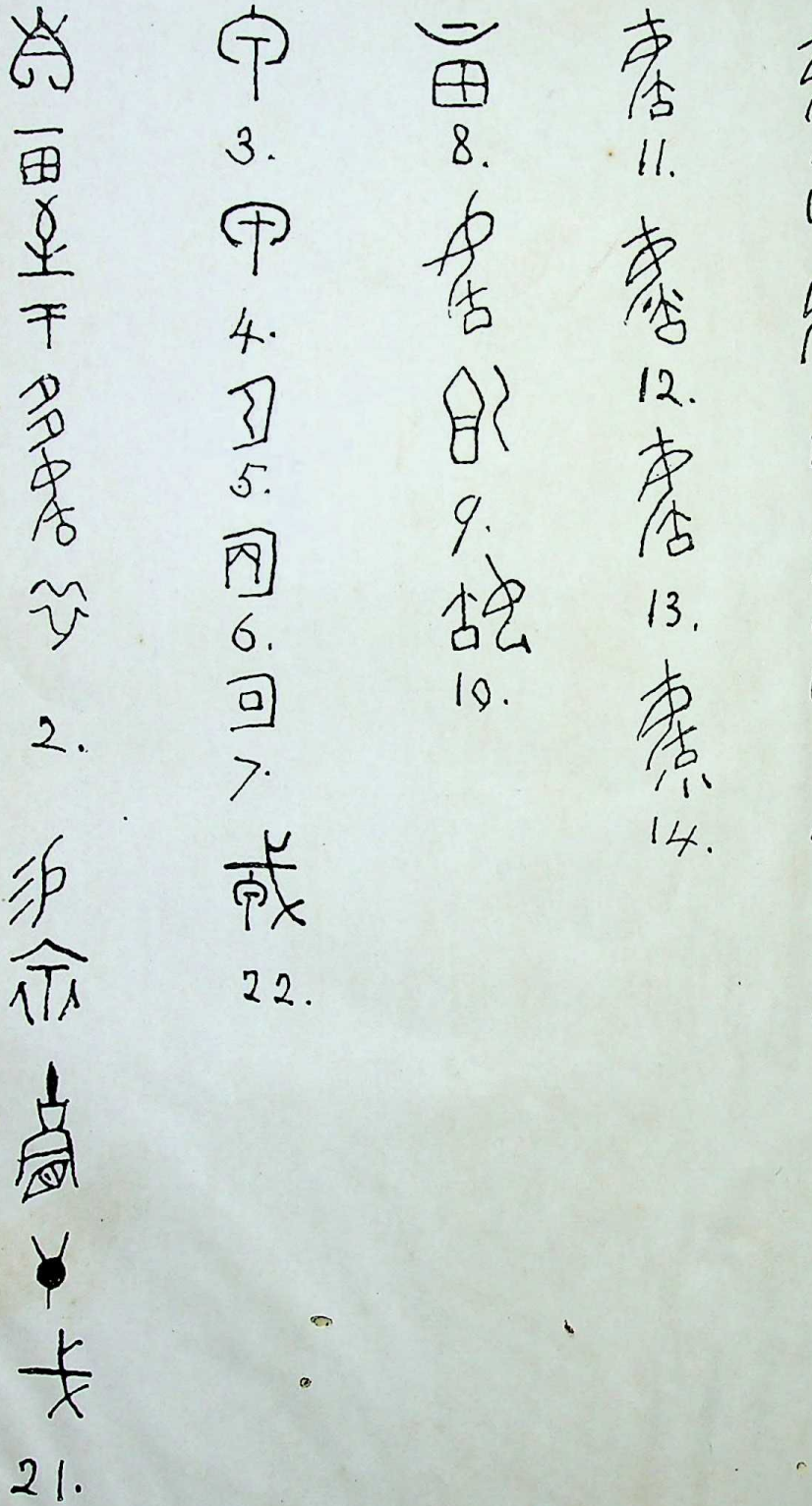

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List of References for Figures in Plate

Abbreviations

C.K.L.C.W. = *Chün Ku Lu Chin Wên* 攈古錄金文.
H. = Hopkins Collection.
I.S.T.P. = *I Shu Ts'ung Pien* 藝術叢編.
Y.H.S.K. = *Yin Hsü Shu Ch'i* 殷虛書契.

Fig.
1. (Upper half) I.S.T.P., No. 1, p. 8; (lower half) I.S.T.P., No. 13, p. 1.
2. Y.H.S.K., iii, 28.
3. Lesser Seal.
4. As cited by Wang Kuo-wei, I.S.T.P., No. 16, p. 3.
5. I.S.T.P., No. 13, p. 1.
6. ,, No. 1, p. 8.
7. ,, No. 1, p. 8.
8. Y.H.S.K., Hou Pien 下, p. 42.
9. I.S.T.P., No. 13, p. 3.
10. Y.H.S.K., vi, 26.

Fig.
11. Y.H.S.K., ii, 25.
12. ,, ii, 25.
13. ,, ii, 25.
14. ,, ii, 24.
15. ,, Hou Pien 上, p. 20.
16. H., 550.
17. } Parts of the above characters.
18. }
19. }
20. H., 227.
21. C.K.L.C.W., vol. vii, p. 16.
22. Lesser Seal.

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Geographical Notes

By the Rev. Professor A. H. Sayce

Was Oropus the Classical Name of Carchemish?

THE name of the important Seleucid city which occupied the site of the ancient Carchemish is still uncertain. German scholars have identified it with the Oropus or Europus of classical geography, but as is pointed out by Commander Hogarth, who has discussed the question very fully in *Carchemish*, pt. i, pp. 19 sqq. (1914), if Oropus is identified with the town placed by the Peutinger Table between Birejik and the Sajur, and this again is identified with Carchemish, the mileage attached to it will not agree with the actual facts. There is the further difficulty that, although one of the modern names given to the site is Jerabîs, which could be derived from Oropus, or rather its later Greek deformation Europus, the more usual and probably older name is Jerablûs, which is Hierapolis.

But there is yet another difficulty. Ammianus Marcellinus (xiv, 8) states that one of the chief cities of Northern Syria in the neighbourhood of the Euphrates was Hierapolis, which was also called Ninus. The codices (Vaticanus and Petrensis) read *Hierapoli veterennino*, which has hitherto been wrongly emended. But it is evident that the first *n* should be *u*, as is so frequently the case in MSS., *u* or *v* standing here, as elsewhere, for *v(el)*. Hence the original text will have been *Hierapoli vetere v(el) Nino*, "the older Hierapolis or Ninus." The later Hierapolis was the modern Membij, where the archæological remains are not earlier than the Seleucid era, and which after the foundation of its temple inherited the traditions and name of the more ancient city. This explains why Membij (Mabug, Bambykê) is unknown to the Assyrian inscriptions.

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My decipherment of the so-called Hittite hieroglyphic inscriptions (which are really those of the Kaskians and Cilicians) has cleared up the origin of the name Ninus. Nana or Nina was the water-goddess (*ni* signifying "water" in Hittite); hence Nana, the mother of Attys, is said to have been a water-nymph, the daughter of the River Sangarios, a name which appears in that of the Sajur, Assyrian Sagura, Sangura, south of Carchemish. In the Carchemish texts the name of Nana is frequently replaced by the picture of a horse's head, with or without the phonetic complement *ana*. The belief in a water-horse has spread from the country where the horse was first domesticated throughout Western Asia and Europe, and in our own island has produced the kelpie or water-spirit of the Highlands, which assumes a horse's form. The Greek hippocampus or water-horse has played a conspicuous part in art, and the old belief is still embodied in the name of the hippopotamus of Egypt. Carchemish was not only situated on the banks of the Euphrates, it also commanded the chief ford of the high road from east to west, and it was therefore appropriate that it should have been called "the city of Nana". In the texts a synonym of *Karkamisiyas*, "a Carchemishian," is *Nanâ-tis* and *Ninâ-tis*, "a Ninian." The statement of Ammianus Marcellinus has thus been fully verified.

And now to return to Oropus. In the geographical list of Ramses III at Medinet Habu, the names of Mitanni and Carchemish are followed by Uru with the determinative of place. Uru is the Assyrian *uru* "the city", which with the Mitannian definite suffix *-pi* would be written Uru-pi. The suffix is found in a good many geographical names in that part of the world—Tunip, for instance, by the side of Tuna, Til-Barsip, by the side of Tulburs, etc. In Uru-pi, accordingly, I see the origin of the Greek Oropus.

According to Stephanus of Byzantium Oropus was "formerly called Tel-missos". Is Tel-missos intended for Carchemish, *tel* taking the place of *karka*, which was identified

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with the Aramaic כרכא "the citadel"? In WAI. iii, 66, *Ob. d* 33 the name of Carchemish is actually written *Karku-(AN)mas*, "the citadel of (the god) Mas,"[1] and we know from the Old Testament that such etymological puns were common in the ancient Semitic world. In this case it would appear that the *Karkamish uru* of the Egyptian List was interpreted as meaning "the city of Carchemish", and not that Carchemish and "the city" were separate places. On the other hand, according to Shalmaneser III, Pitru, the Pethor of the Old Testament, called Pdri in the geographical list of Thothmes III, lay a little to the south of Carchemish, between that city and the Sajur, and Pitru may be a Mitannian or Asianic word for "city". In Vannic *patari* signifies "city", and seems to be the same word as the Pteria of Herodotus, usually supposed to be the district of Boghaz Keui, though we are told that it was near Sinôpê. At all events, the word *teira* in one or more of the Asianic languages had that signification; thus we have Teira, Thya-teira, by the side of Thyia, Adrianu-thêrai, Têmeno-thyra, Grimeno-thêra, Das-teira, by the side of Das-Tarkon and Das-menda, etc.,[2] to which must be added the Khata-tirra of the Assyrian inscriptions. Some of the coins of Tarsus, again, have the inscription *ορτυγο-θηρα*, which cannot signify "quail-hunt", but must be a Greek form of some such name as Artuga-teira. Artug is named in the geographical lists of the eighteenth and nineteenth Egyptian dynasties. Since the ideograph of "city" has the phonetic complement *-ri* in the cuneiform texts of Boghaz Keui, we may conclude that in the Hittite language spoken there the full word was either *teiri* or *patari*.[3] The Greek Kybis-tra always appears as

[1] Nin-lil is said to be "the queen of heaven of Carchemish". Her Hittite name was Khebe or Khiba.

[2] Ramsay, *Cities and Bishoprics of Phrygia*, p. 144.

[3] The name of the Lycian city Patara would not be connected if Stephanus of Byzantium is right in saying that it was the Lycian word for "a chest". Pteria reappears, letter for letter, in Puterias, which an inscription of the Vannic king Menuas (Sayce, xxxiii) gives as the

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Khubis-na, "the land of Khubis," in the cuneiform inscriptions of Boghaz Keui and Assyria; in a Hittite hieroglyphic inscription found at Andaval (Messerschmidt, *Corpus inscriptionum Hettiticarum*, xxxi, C) it is written *Ku-bi-is-s-a mias*, "the city of Kubis," where the compound ideograph *mias* would have been read *teiri* in the language in which that word was used. The lengthened form *teirya* would have become τερα (for τερϳα) in Greek, and so the *-tra* which we find in Asianic geographical names of the later period.

All this leads me to the conclusion that the name Uru-pi was employed in a double sense. Originally it would have denoted the township south of Carchemish, known to us as Pethor, but since Carchemish was *par excellence* the city of that region the title came to be attached to it, and eventually passed to the Greeks under the forms of Orôpus and Eurôpus. The double employment of the name would explain why the Peutinger Table (1) does not name the station between Birejik and the Sajur, and (2) gives a mileage which suits the site of Pethor but not the site of Carchemish.

In the sixth century Europus, which "popular etymology" substituted for Oropus, appears as Aghropos and Aghripos in Syriac documents. Aghripos could easily have yielded an Arabic Jerabas or Jerbas by assimilation to Jerablûs, i.e. Hierapolis, which must therefore have been the more customary name of the place, and Jerabas would naturally pass into Jerabîs, the normal plural of a word Jerbas. Dr. Trowbridge, the head of the American College at Aintab, told me many years ago that some of his converts who lived in the neighbourhood of Jerablûs had informed him that

ancient name of Palu on the northern bank of the Euphrates (the modern Murad-su), about midway between Malatiyeh and Van. It lay near Gupa, the Assyrian Kuppu, Khuzâna (new Khozan), which is probably the Khuzarina of the Assyrians, and Aassa, called Aassata in the inscriptions of Boghaz Keui. A variant form of the word *teira* probably recurs in Qulbi-tarris, one of the cities of Melitene conquered by the Vannic king Sarduris II (Sayce, l). Qulbi-tarris must be the Kholma-dara of classical geography, Qulbi or Kholma being the deity Khalmis of the Hittite hieroglyphic inscriptions.

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Jerablûs was the "Arabic" and Jerabîs the "Turkish" name. Many of the places in that part of the world bear double names, as I learned when I was travelling there; the first village I passed after leaving Bab, for instance, was called Kebêsîn by the Arabs and Bash-Keui by the Turks, and an old city site near the ford across the Sajur was known as Tel Mansûr to the Turks and Tel el-Yaṇsûl (also pronounced Yansûr and Yansûb) to the Arabs.

By way of conclusion I must add that the Mitannian *-pi* was also pronounced *-wi*, and could therefore be represented in cuneiform by *-mi*. In fact, the non-Semitic absence of distinction between *m* and *w* in Assyrian is one of several examples of Mitannian or Hittite influence that can be indicated upon Assyro-Babylonian. Sir W. M. Ramsay has shown that *m*, *b*, and *w* are interchangeable in the geographical names of Asia Minor, and in the cuneiform texts the same name can be written with *m*, *w*, *b*, and *p*. The character 𒉿 has the various values of *mi*, *pi*, *wi*, and *yi*. Consequently, Uru-pi could also appear in script as Uru-mi, Uru-ma, and the question, therefore, arises whether "the Hittite soldiers, Kaskians and Urumians", mentioned by Tiglath-pileser I as having occupied Subarti or Northern Syria—not to be confounded with the Supria of the Assyrian period[1]—did not come from Carchemish. 'Urma (the modern Urûm), a little north of Carchemish, is already named in the geographical List of Thothmes III (No. 208 and perhaps 313),[2] while in the Hittite hieroglyphic texts the writers describe themselves as Kaskians. Thus, in the earliest text yet found at Carchemish, Yakhanas, who gave his name to the conquered district of Yakhan, calls himself not only "a Hittite" (*Khat-tu-wias*), but also "a Kaskian" (*Ki-is-ka-a-ni-is*), and he further takes the titles of a follower of the god Tarkus and of "the Sun-god of the Kaskian land".

[1] In a Boghaz Keui text (*Keilschrifttexte aus Boghazkoi*, i, 22, *Rev.* 6) the land of Subari comes between Aleppo (Khalba) and Kinza.

[2] Maspero identifies it with the Greek Urma Gigantos. Gigantos is probably an echo of the old name of the district Gagati.

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The City of Bursakhanda

In the *Proceedings* of the Society of Biblical Archæology, December, 1915, I have transliterated and translated an interesting cuneiform text discovered in 1913–14 by the German excavators in the house of the Hittite Resident at Tel el-Amarna. The text, which is in the Hittite form of cuneiform script, contains a semi-legendary account of a campaign of Sargon of Accad in the later Cilicia, and was the first tablet of a series which seems to have been devoted to the earlier history of Asia Minor. The chief objective of Sargon's campaign was the city of Bursakhanda, which was situated on a mountain, and from which he brought back to Babylonia two species of fig-tree, vines, roses (*wurtinnu*), and other northern plants, as well as the *ulpanu* or *lupanu*, the nature of which is unknown. That the campaign of Sargon was a fact is now proved by Dr. Forrer's discovery of a tablet from Boghaz Keui, at present at Berlin, which records the invasion of eastern Asia Minor by a king of the dynasty of Akkad, and its repulse by the combined forces of the kingdoms of Kanes, Khatti, and Kursaura, the Garsaura of classical geography.

Another Boghaz Keui tablet, which embodies the annals of the Hittite king Telibinus, and has been translated by Professor Hrozný, informs us that Khattusilis I, the founder of the Khattu empire, conquered the Cilician cities of Khubis-na, Tûwanuwa, Nenassa, Lânda, Zallara, Barsukhanta, and Lu . . . na. Khubis-na is known to us from the Assyrian inscriptions, which show that it was the classical Kybis-tra; Tûwanuwa is the neighbouring Tyana; Lânda may be the Leandis of Ptolemy; and Nenassa reminds us of the classical Nanessos. Lu . . . na may be the Lamena of Shalmaneser III, which lay between Tanakun (Thanakê) and Tarsus, and was probably the Lapana of the Tel el-Amarna tablets. Barsukhanta is evidently the Bursakhanda of the Sargon legend, and will have been in the vicinity of Kybistra and Tyana, that is to say on one of the northern heights of

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the Bulgar Dagh. Unnamisu, where Sargon is said to have spent his third year, will have been on the coast of the Gulf of Antioch, possibly where the Iônê of Stephanus Byzantinus was situated. It is possible that Barsukhanda should be identified with the city of [B]arrukhunda, which Tiglath-pileser I places in the province of Qumani. In KAB. iv, 13, Obv. 47, the name is written Barsukhuntas.

Javan

In Gen. x, 2, 4, Javan is the brother of Tubal and Meshech in Eastern Asia Minor, and the father of Elishah—the Alasia of the cuneiform records, whose name was preserved in that of the Alêian (= Alêsyan) plain of Greek geography, as well as of Tarshish or Tarsus, of Kittim and of Rodanim, that is to say Cyprus and Rhodes. The geographical position assigned to him is confirmed by notices in Greek writers. Stephanus of Byzantium tells us that the Syrian Antioch was built on the site of the ancient Iônê, and the *Periplus Maritima* states that the town at the mouth of the Pyramus, afterwards known as Kephalos, was also called Ionê. In accordance with this Kedrenos states that the older name of Antioch was Iopolis. The Egyptian officer Amon-em-heb in the time of Thothmes III describes "the land of Mount Uan" as being to the west of Aleppo, and in the "Second" Arzawan letter in the Tel el-Amarna collection Labaia calls himself *memis-ta Uanwannas*, "thy spokesman of the land of Uan" (Knudtzon, 32, 2). In an Assyrian geographical list the name appears as Yaêna (WAI. ii, 53. 8), the country of Yaêna being preceded by the country of Cilicia (Khilakku) and followed by the country of Malatiyeh (Melidi). Yaêna by the side of Uan presents the same vowel-change as the Heb. *yâyin*, "wine," Assyrian *înu*, by the side of *οἶνος*, *vinum*. In fact it is possible that the country took its name from the vine; there was a city of Oinoandos somewhere in that part of the world. Mr. Tomkins was probably right in

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identifying the Uanai of the geographical list of Thothmes III (No. 145) with Uan.

Kas and Kusa

The "country of Kasi", also written Kaśi and Kasse, in the Tel el-Amarna tablets, has been erroneously identified with the Kassite people of Babylonia, and supposed to represent Babylonia. Babylonia, however, is always called Karduniyas in the tablets, and the name of Kasi is given only (1) to Cush or Ethiopia (Knudtzon, 49. 20; in 131. 13 it is *matâti Kasi*, "the lands of Cush"), and (2) to a district which adjoined Mitanni, Naharaim, and the Hittites. Thus, in Knudtzon 76. 15 it is coupled with Mitanni; in 116. 71 we have Mitanni, Kaśi, and the Hittites, and in 288. 36 it is joined with Nakhrima or Naharaim. It thus corresponds with "the country of Kusâ" of the Assyrian texts. A letter published by Dr. Pinches in the *Proceedings* of the Society of Biblical Archæology, 1881, p. 13, informs us that the cities of Qarnê—the Karna and Atu-geren of the Egyptian geographical lists—Dâna, Kullania (the Biblical Calneh), Arpad, and Iśana, were all situated in the country of the Kusâ or Kusæans, which must, therefore, have comprised that part of Northern Syria which lay immediately to the north of Naharaim. In the larger "Hittite" hieroglyphic inscription from Hamath, line 1, as copied by myself from the original stone, the king calls himself "king of the land of Kus" (*Kusi-mia*), and in the Carchemish inscriptions one of the royal titles is king of "Kas" or "Kus" (*Kusannas*). It is worth notice that the first part of the name of the conqueror from Naharaim who subjugated Palestine in the twelfth century B.C. was Chushan (Judges iii, 8), which would exactly correspond with *Kusanna(s)*, "of the land of Kus." In any case, the name of the Kusâ was preserved in classical times in that of Mons Casius.

The Lead-mines of Early Asia Minor

The Cappadocian tablets, which belong to the age of the Third Dynasty of Ur (B.C. 2400), show that the mining and

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export of lead was one of the chief industries carried on at Ganis, now Kara Eyuk, 18 kilometres N.E. of Kaisariyeh. According to a tablet in my possession the lead was exported to Assyria (*mat A-sur*), and from thence distributed throughout the Near East. The names are given of a good many of the places in which the metal was found. Among them are Abê, Amas, Nakhur (evidently the Semitic Nahor), Sasakki, Sarniga, and perhaps Luśi and Niri, to which a fragment in my possession adds Zanuki. Another fragment belonging to myself refers to "a man of Abê" (*A-be-im*).

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A Short Anthology of Guran Poetry

By Major E. B. SOANE, C.B.E.

THE Anthology is a manuscript furnished by Dr. Sa'īd, of Sina, to the British Museum, numbered Or. 6444; the writer is working from a photographic reproduction made for him in 1908 by order of Mr. A. G. Ellis.

The distance from the Oriental Department of the British Museum and absence of sufficient books of reference—this article is being written in Sulaimania, South Kurdistan—is a handicap on adequate comparison of words.

The Anthology is a collection made at Sina by Abdu'l Mu'min, son of Jamālu'd Dīn, Mubayyinu'l Mulk, between the years of A.D. 1783 and 1785, and contains specimens of the work of twenty-seven poets, and a number of fragments classified according to the final letter of the rhyme.

It has not been possible to ascertain the dates of any but a very few of the poets, who were all natives of Sina and the district of Aorāmān on the Perso-Turkish frontier, which secluded mountain mass is still the home of the Gūrānī language, and where many more interesting manuscripts are still to be found.

The period during which the collection was made was that of the semi-independent Vālī of Ardalān Khosrū Khān, who, like his predecessors, encouraged an entourage of poets and littérateurs, in which he was imitated by the Sultāns of Aorāmān-i-Takht, who, though subject to him, were semi-independent, as they are to-day.

After the rise of the Qājār dynasty, Ardalān fell from its high estate, and as the family grew effete, married Persian ladies, and lost power, the Court was dispersed and the writing of the Gūrān language (which had for years been only artificially kept alive in Sina by its recognition as the official language) fell into disfavour and ceased.

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Gūrānī is a dying language. It was in all probability but a dialect of Persian at the Arab conquest, and owing to its location in the mountainous districts of the Kermānshāh and Ardalān provinces, escaped both the grafting of Arab words and the development and change which ensued in Modern Persian.

It was not, however, to exist undisturbed. The seventeenth century saw the rise to power of the Kurdish princes of Rawāndiz, Bitlis, Amādīa, and the Kurd Sardārs of the Mukrī. The tribes on the Turkish side shared in the spirit of conquest exhibited at the time by the Turks, and took the opportunity to spread westwards and southwards into Persia, absorbing some populations and driving others farther into the mountains. The most notable historical example of the Kurd invasion is Zuhāb. Here Abdāl the Bājilān from the Khoshnāw district, at the head of a body of tribesmen, emigrated to Zuhāb and the lands now known as Jūānrūd.' They found living there a confederation of tribes which they promptly reduced and gave them the Kurmānjī name of Gūrān, meaning "bondmen" and "peasants", which name is to-day that of a large heterogeneous collection of tribal elements in the locality. As time went on sections of Kurd tribes adopted the habits of the newly named Gūrān and shared with them their winter and summer habitats. The result is to-day that the so-called Gūrān tribe of Zuhāb and Jūānrūd contains two distinct elements—the Kurd sections, all Sunni Muslims, speaking their own Kurmānjī, and the "Gūrān" original sections, mostly Ali Allahī, non Muslim by faith, and speaking the "Gūrānī". The Bājilān family itself has so well preserved the original condition that to-day the members of "begzādas" of Bājilān speak Kurmānjī, while the tribe formed of the original inhabitants of Zuhāb plain speak a dialect of Gūrānī.

In Ardalān gradual penetration was more the rule, and it is a matter of history that by A.D. 1650 the bulk of the population already spoke Kurmānjī, which is now the language

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of the capital, Sina town. In short, to-day the Gūrānī is spoken only by the tribes of Aorāmān, Rījāb, Kandūleh (near Kermānshāh), and the original sections of the Sinjābī, Gūrān, and Bājilān tribes, representing but a small fraction of the population, and among these it is dying out, Kurmānjī taking its place.

The Gūrānī language itself has been termed a Kurdish dialect. It is, however, not so at all. Kurmānjī has its characteristic grammatical forms, vocabulary, and idiom which have nothing in common with Gūrānī. The latter, however, shows in its grammatical forms that it is but a Persian variant, long separated from the mother tongue, and having borrowed widely in more recent times both from Kurmānjī and from Persian. It is the most northerly of the group of Persian dialects represented by Luristān and comes very close to the Lur languages of extreme northern Luristān. At the same time it is the least affected by later Modern Persian, or else split earlier from the original mother tongue.

The dialect of Gūrānī spoken by the "Gūrān" tribes varies in some numerous minor details, but preserves the main characteristics, the most conspicuous of which is the aversion to initial *kh-*, which it turns to *w-*, or has, perhaps, never used at all.

Houtum Schindler, who made extensive studies on Aryan dialects in Persia, mentions the Gūrānī language as spoken by the tribe and by the people of Kerind and Bīwanīj. He, however, erroneously includes among the Gūrānī-speaking tribesmen the Nairzhī and Tāīshaī ("Nirizi Taischi"), who are Kurds speaking Kurmānjī.[1] The words and sentences he quotes show that the modern Gūrānī tends increasingly to absorb Modern Persian and Kurmānjī words and to lose its individuality. The Gūrānī of the Anthology is very much less influenced by outside languages.

A further proof of the relation of Gūrānī to Modern

[1] "Beitrage zum Kurdischen Wortschatze," in the Journal of the Deutschen Morgenländischen Gesellschaft.

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Persian is the resemblance seen here and there with such dialects as that of Sō and other well-preserved Persian dialects in the interior.

Still more interesting than its connexion with the dialects of Persia are some important features it shares with the peculiar Zāzā language of mid-Kurdistan. This latter, a non-Kurmānjī language, while it has borrowed very widely from Kurmānjī, is of the same class as Gūrānī, but unaffected by New Persian, and in some features represents a better preserved specimen of what Gūrānī may once have been. With Gūrānī it shares the repugnance to initial *kh-*, giving initial *w-* where Avestic and Old Persian have initial *hw*, *hv*. Unlike Gūrānī, however, it is archaic in its numerals, particularly giving such words as *hirye* for "three" and *das* for "ten".

ABBREVIATIONS.—The following are adopted in the text:—

OP	Old Persian.
Av	Avestic.
Phl	Pahlavi.
NP	New Persian.
Kur	Kurmānjī, the language of the Kurds.
Kan	Kandūlaī, a Gūrānī dialect spoken near Kermānshāh.
GuT	Tribal Gūrānī.
R	Rījābī and Bīwanījī dialects of Gūrānī.
A	Modern Aorāmānī.
Lk	Lekī of Kermānshāh district.
L	North Lurī.
Z	Zāzā.
S	Dialect of Sō near Isfahan.
M	Māzanderānī.

The specimens quoted are taken at random from the Anthology. The verse form throughout is the same; couplets, some series of which rhyme. The poem form does not fall into any of the categories of conventional Persian poem form, being but a succession of couplets with internal rhyme, though the rhyme occasionally persists through several

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couplets. A feature of the poems is the introduction in some cases by a defective couplet, the first line of which forms part of the second line, as :—

Yārān lālī dīm
Ārū je lālān ajab lālī dīm

Shīrīn nīshteran
Na dōr i dīdash hazār nīshteran

Shīrīn nēāwā
Pai sufta dilān purr shang nēāwā

The metres are natural ones, and, like the poem forms, do not conform to Persian rules, which gives the verse a freer swing and more natural cadence. Like most Lur and Kurd songs, they should be heard sung for the metre to be appreciated.

SPECIMEN 1.—Folio 11 of manuscript. Shaikh Ahmad Takhtī of Aorāmān i Takht, *circa* A.D. 1640. Three verses to Autumn.

Hawr i nō āmā kham pōsh o namīn
Min dūrīn wilāt o dard muhtamīn.
Tā je hawr mabū yek qatra rēzān
Min je dīdam sēl hūnāw horēzān.
Nam i nō pāīz o kham hijrān bakht
Magīrān bi gird jastaī sang sakht.

Translation

New clouds have come, grief enveloping and moist
I [am] from a far land, overwhelmed with sorrow.

No sooner will the clouds let fall a drop
Than from my eyes a torrent of blood-tears will outpour.

The dews of new autumn and the griefs of the exile
Close around one's soul a hard rock.

Notes on Text

I have only noticed words calling for attention as different from NP. Ordinary NP words or Arabic loan-words are assumed to be known.

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Verse 1, line 1.

hawr, "cloud." This form is met with throughout Kur and L. Cf. Av *awra*, Phl *avar*, S *awr*, R ? A, Lk *hawr*.

āmā. 3rd pers. sing. pret. ind. of infin. *āmān*, "to come." A purely Gūrānī and L word. Kan, R, A, GuT *āmān*, Z *āmē*.

kham, "grief." Hardening of initial *gh-* to *kh-* is common to L Gūrānī and Kur; cf. *bākh*, *dākh*, etc.

namīn, "possessing moisture." The attributive suffix *-īn* is common to Gūrānī as to NP.

Line 2.

wilāt, Arabic *wilāyat*, the usual Gūrānī form of the word.

Verse 2, line 1.

je, "from." NP *az*, OP *hacha*, Av *hacha*, Phl *aj*, Kan *zhe*, R *je*, Z *sa*, *se*. Kur does not use the word except in the northern dialects in the form *zhe*, meaning "for".

mabū. 3rd pers. sing. pres. ind. of *būin*, "to become." No non-NP dialect uses the NP root *shav*, every one has preserved the use of root *bū*, Av *bū*, Phl *bū*.

Line 2.

hūnāw, "bloodwater." NP *khūnāb*. The use of initial *h* and *w* where NP shows *kh* will be frequently remarked, Av *vohūni*, GuT *hūn*, A, Lk, R *khūn*, Z *goen*.

horēzān. 3rd pers. pl. pret. ind. from infin. *horēzān*, "to rise, come up, and forth." This verb, which is non-existent in NP, is common to many dialects, but does not exist in Kur. It is a compound of *hor* and *ēzān*. The prefix *hor*, though an uncommon variant of Av *fra-*, Phl *far-*, is met with in various forms in other dialects. The root *ēz* is apparently the Gūrānī variant of Av root *sta*. Cf. NP *bar khāstan*, Kur *hal stān*, Lk *horesān*, Kan, R, A *horēzān*, Z *weristān*, L *virisan*, Maz roots *pares*, *ores*, *vores*, *virisht*.

Verse 3, line 2.

magīrān. 3rd pers. pl. pres. ind. of *gīrān*, "to take." In conjunction with the next word, *bigird*, means "to close

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round, envelop". The use of the tense particle *m-* is characteristic of Gūrānī and L, as opposed to the Kur *da-, a-*.

jasta, "being, entity." I can find no parallel in NP for this word, which is frequently seen in Gūrānī. Kan does not use it. Justi, in a note on Houtum Schindler, suggests the comparison with NP *khajastah*, for which I can see no justification.

SPECIMEN 2, by the same author as 1. Two verses to Autumn.

Ārū khazānī zārd bāmam wīnā
Kafta bī na līw i tāf gūl mīnā.

Aksash dīār bī na gūlāw i tāf
Chimān min madrām na rūī jām i sāf.

Translation

To-day, of yellow-crested autumn I could see,
Fallen on the lip of the torrent pool, a picture.

Its likeness was visible in the pool of the torrent:
Thus could I see it on the surface of the smooth plane.

Notes

Verse 1, line 1.

ārū, "to-day." Most L dialects use *ī* for the demonstrative in the words "to-day", "this year", etc. Kur uses its characteristic *am-*. Av *ā, hā*, Phl *ē*, S, R, Kan *ārū*, A, Z *aro*. The Gūrānī has lost the final consonant of Av *raoch* and Phl *roj, roch*. Kur *roj, rozh, roch*.

khazānī zard bām, "yellow-covered autumn."

-am wīnā, "to me visible." *wīnā* is probably a loan-word from NP *bīnā*, though the initial *w* is more faithful to the original *v-* of Av √*vaēn*, OP √*vain*.

Line 2.

kafta, "fallen." Part. past of *kaftin*, which is common to Kur and Gūrānī. Where NP, following Phl, has adopted the particle *ō* with the significance "down", plus √fat, pat

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"fall", Kur has taken a prefixial *k-* with the same root. Possibly Gūrānī has borrowed it from Kur.

bī. 3rd pers. sing. pret. ind. of infin. *bīan*, "to be." Kur inf. *būn*. The form *bīan* is common to all the non-Kur languages, Kan, L, Lk, R, Z, GuT, √*bī*.

na, "on, by, at." Common to all Gūrānī and some L dialects. A connexion is suggested with the Av *ni-*, OP *niya-*, "down," used in connexion with verbs. Kur *la*.

līw, "lip." Kur, GuT, R, A, *līw*, S *lew*, NP *lab*.

tāf, "torrent, spate." Cf. Phl *topānik*, "violent, strong." A, R *tof*, Kur *lāf*.

gūl, "a pool." A word commonly used in all L, Gūrānī, and South Kur. Apparently a loan-word from Turkish *geul*.

mīnā, "a likeness," from √man, "remain, resemble." Parallel to NP *mānand*.

Verse 2, line 1.

aksash, *aks-ash*, "its likeness." *Aks* is an Arabic loan-word through NP. *Ash* is used by all Lur and NP dialects, as well as by NP. It does not exist in Kur. The consistent use of enclitic *-ash* is one of the features of Gūrānī which lead to its classification with, and as relation of, NP, as opposed to connexion with Kur, whose independence of NP and its allies becomes increasingly evident on close study. In this case the adherence to OP *-shaiy*, *-sh*, by NP and allied languages is little more faithful in form to origin than the Kur *-ī*, *-ē* to the Av *-hī*, *-hā*.

dīār, "visible." NP *dīdār*.

gūlāw, *gūl-āw*. Water lying in a hollow. See *gūl* above.

Line 2.

chimān, "thus." Cf. NP *chinān*. Kur has no similar word.

madīām. 1st pers. sing. ind. past imper. from √*di*, "see." NP *mīdīdam*. Gūrānī and L form the imperfect tense by the addition of *-īā-* to the root and before the enclitic pronominal ending.

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rūī jām i sāf, "the face of a smooth plane." NP metaphor borrowed entire.

SPECIMEN 3.—Folio 12 and 13. Muhammad Qulī Sulaimān, date unknown. Six verses to Autumn.

Khazānī bi chākh
Ārū dīm bi cham khazānī bi chākh.

Rangish pai nabī dardīnash dākh
Min dar sāt je dil kīshām āir ākh.

Pirsām hai khazān rang i baqam wēna
Zarrī dākh i dard i jefā i min pai na.

Sā biwācha paim tū je chi kārī
Pēsa rang i sāf i bīdardān dārī.

Wātish hai lēwa i dil i pakhm pāra
Min hūn i zāmam kaftan na chāra.

Tu māchī bī dard har kas bī dard bū
Shā allah chanī garr bi zukhāl gard bū.

Translation

Autumn wounded :
To-day I saw with my eyes Autumn wounded.

It had not its colour, because of its painful scar.
I then from my heart heaved a fiery sigh.

I asked : "Oh, Autumn, of hue like logwood dye,
Apply to it a little of the pains of my suffering."

Then said he to me : "What, then, art thou ?
Thou hast a clear colour like that of the care-free."

He said : "Oh, Deceiver of the torn-hearted,
The blood of my wound it is fallen on my face.

Thou callest care-free whoever hath this ill ?
Please God ! with flames may he be burned to charcoal ash."

Notes

Verse 1, line 1.

chākh, "a wound." An unusual word.

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Line 2.

ārū. See Specimen 2.

dīm. 1st pers. sing. pret. ind. from infin. *dīan,* " to see."

cham, " eyes." Cf. S, R, Lk *cham,* Z *chim,* A *cho,* Kur *chaw, chāf.*

Verse 2, line 1.

rangīsh, rangī-sh, " its colour."

pai nabī, " to it " or " on it ", " was not ". Cf. Av *paiti,* OP *apiy,* Phl *pat,* Kan, GuT, A, Lk *pai,* Kur *pē.*

dardīnash dākh. An inversion which would be in prose *dākh i dardīnash,* " its painful wound," the word *dākh* (NP *dāgh*), " a scar," being used in this meaning.

Line 2.

min. 1st pers. pron. NP alone of Aryan languages in Persia and Turkey shows *man,* all others *min,* except Kur, which preserves Av *azem* in the form of *az,* with dative and accusative *min, me* ; and Caspian Talish dialects, *as, az.*

dar sāt. Borrowed from NP *dar sā'at,* " instanter."

kīshām. 1st pers. sing. pret. ind. of infin. *kīshān,* " to pull, draw, suffer, etc." NP *kashīdan,* Kan, L, GuT, A, Lk, R *kīshān,* Z √*kish,* Kur *kēshān.*

āir, " fire." Av *atār, ātarsh,* OP *ātar,* softened in obsolete NP to *ādar.* R, Kan, GuT, S *āir,* A *āgir,* Z *ādir,* Kur *āgir.*

ākh, " woe ! "

Verse 3, line 1.

pirsām. 1st pers. sing. pret. ind. of infin. *pirsān,* " to ask."

rang i baqam, " the colour of log-wood, or red dye."

wēna, " like." Cf. NP *gūnā,* Kan, GuT *wēna.*

pai na, " put on it ! " *Na* is the imperative of *nīān,* " to place." Cf. NP *nihādan,* GuT, Kan, R, A *nīān.*

Verse 4, line 1.

sā for NP (*Ar*) *sā'at* in the meaning " then ".

biwācha. Equivalent of NP *biguft.* From infin. *wātin,* " to speak." Kan, R, L, Lk *wātin,* Maz *bwātin.* The first four use the stem *wāch-* in all tenses except preterite and tenses

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formed from it, and the imperative. S uses *waj-* and Z *vaj-*, a good preservation of the Av √*vach* and Phl √*vāj*. The Kur shows variations of the root in √*ezh*, *bezh*, though it uses more generally a number of other roots peculiar to itself. Gūrānī does not appear to possess the *gu-*, *guf-* stem of NP from OP √*gub*.

paim, *pai-m*, "to me." *Pai* here is not the same derivative as *pai* in verse 3, line 1, but is the same as NP *bi*, cf. Av *aiwi*, *aibī* (Gatha), OP *abiy* becoming Av *upa*, OP *upā* with accusative following. In the meaning of "to", *pai* occurs in Kan, Lk, Kur, A, R.

tū je chi kārī. A parallel of the NP colloquialism *Tu chi kāra ī*? "What art thou?"

Line 2.

pēsa, "whitish, white." Cf. Phl *pēseh*, NP *pēsī*, *pēs*, *pīsī*, "leprosy." Parsi *pīsk*. The rest of the line is as NP. The use of *dārī*, "thou hast," is for metre's sake; the true Gūrānī should be *madārī*.

Verse 5, line 1.

wātish, 3rd pers. sing. pret. ind. of infin. *wātin* as above. The use of the enclitic *-ish* in this part of the verb is common to Kan, R, Lk, A. Cf. colloquial NP *guftash*, "he said," not "he said to him".

pakhm pāra, "torn and rent." *Pakhm* may be a loan-word from Kur; it is in daily use among the Jaf nomads of the frontier.

zāmam, *zām-am*, "my wounds." A, R, Lk, GuT, Kan *zām*, NP *zakhm*. *Zām* is also used by the Kurds of the extreme south, but not is a Kurmānjī word.

kaftan, 3rd pers. sing. perf. of infin. *kaftin*, "to fall." *kaftan* is strictly *kafta-an*.

The use of *-n* as part of the verb "to be" is very widely spread all over Persia in dialect. Cf. *khuban*, "it is good." Kur does not use it. Cf. GuT *bīn*, "he has been." Kan

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han, "it is," R *an*, "it is," R and A both the *han-*, as the stem in pres. ind. of "to be" throughout the six persons.

na chāra, "on the face"; *chāra* = NP *chihra*.

Verse 6, line 1.

tu māchī, "thou sayest." A and R show the complete form *mawāchī*, S *awajī*, GuT *mawāzhī*. Kan follows Gūrānī.

bī dard, "without pain."

bī dard, "with this pain," *bi ī dard*.

bū. In next line also, "may he be." NP *bāshad*, *buvad*. Common to L and Gūrānī. Kur has its own form.

chanī, "with, like, by." Kan, A, *chanī*. Kur does not use it.

garr, "flames." The word is not generally used in other Gūrānī dialects, nor in Lk. It appears to be a loan-word from Kur.

zukhāl-gard, "charcoal dust." See note on hardening of *gh* to *gk* in previous specimen. Kur does not use this word.

SPECIMEN 4.—Folio 32. Mulla Tāhir Aorāmānī, date unknown. Fourteen verses on the Basil, explaining how it came by the black marks on its leaves.

1 *Tilīw je rēhān purr shān shīwa*
Lāf madā bi zulf i kasīwa.

2 *Mawātish qatra i qatrān bīzanān*
Hām rang hām būyī zulf rīzanān.

3 *Min wātim, "Rēhān, zaid i sārāī*
Bi tu chi lāiq lāf bīnāi?"

4 *Rēhān wāt, "shart i īma wa tu wa yār,*
Binīshīmī wa ham jāī bī aghyār.

5 "*Rū bi rūm kara chanīw zulf dustit*
Chanī qiblagāī khās āwāt wustit.

6 "*Agar khelāf bar shūm lāf bīnāī*
Bimālā na rūm rang i sīāī."

7 *Ima wa gul i rēhān har dū bo wāna*
Shīmī, kirdmān sijdaī āstāna.

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8 *Bimāla i dilsūz lālām lāl wēna*
Pai chandī tāī zulf i tughrāī meshkēna.

9 *Wātim, " Muruwwatan, Shāī Perī Pāya*
Bā pakhsh bū na rūt zulf i mishk māya."

10 *" Dā īma wa rēhān dāwā wa jastimān*
Bar shū bi rāstī bēn o bastimān."

11 *Nakird darīkhā hājat kird qabūl*
War dā bi wardā dasta i zulf i lūl.

12 *Sā rēhān nāshaī zulfash khās zānā*
Pai rū sīā ash " Aī Wallāh! " ash wānā

13 *Zāmen bird wa zīd i sāya i dirakhtān*
Tā bizānū khāk chūn sīa bakhtān.

14 *Parī paikīāī lāf wardish nidāmat*
Rū sīāīsh mand tā rūī qīāmat.

Translation

1 A sprig of basil, full of pride and coquetry,
Was mocking at the tresses of a personage.

2 It said, " Drops of pitch, should they sift [them],
Like hue and like smell of her locks would pour down."

3 I said, " Basil, thou are desert born,
Wherefor art thou fitted for such mockery ? "

4 The Basil said, " A pact be it that I and thou and the beloved
Sit down together in a place with no others.

5 " Confront me with the locks of thy beloved,
And with the adored exercise thy wish.

6 " If my mockery turn out an error
Rub on my face the colour of black."

7 I and the Basil both to the house
Went, and prostrated ourselves on the threshold.

8 With heartbreaking cry I wailed like the dumb
For a few locks of the musk-scented, curled tresses.

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9 I said, " 'Tis but justice, fairy-footed Queen,
Let your musk-endowed locks scatter over your face.

10 " Contention hath struck the souls of me and the Basil;
Let the truth of our argument come out."

11 She tarried not, but granted our request,
And loosed before her a handful of her curly locks.

12 Then the Basil knew the intoxication of her locks,
And cried " Ai Wallah ! " for its blackened face.

13 It took refuge under the shade of the trees
Till it should know dust, like the unlucky.

14 For the result of its mockery it ate repentance,
And its face has remained blackened till the Day of Judgment.

Notes

Verse 1, line 1.

tilīw, indefinite singular of *til*, " a branch, sprig, shoot." The word does not occur generally in Gūrānī or L, and may be a loan-word from Kur, the southern dialects of which use the word *tīl* to signify a shoot, or a low hill-spur. Cf. also North Kur, *tilī*, " a finger." No equivalent in NP.

rēhān. The sweet basil, much prized in the mountains for its sweet smell. It is often referred to as *gul i rēhān*, though its flower is insignificant.

purr shān shīwa. The conjunction *o*, " and," is omitted between the second and third words for metre's sake, a common feature of this type of poetry. Both words are Arabic, in common use in NP.

Line 2.

lāf. In NP *lāf* usually means " boasting " simply. In Gūrānī it always means " belittlement, mockery ".

madā. 3rd pers. sing. ind. imperf. of infin. *dān*, " to give."

kasīwa. Indefinite sing. of *kas*, " a person."

Verse 2, line 1.

mawātish. 3rd pers. sing. imperf. ind. of *wātin*, " to say," for note on which see above. Kan, A, R, GuT *mawātish*.

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bīzanān. 3rd pers. pl. pres. subj. from inf. *bīzanin,* "to sift."

Line 2.

hām. NP *ham,* "equal, like." The lengthening of the vowel is common to Gūrānī and Kur.

rīzanān. Same form as *bīzanān,* from inf. *rīzanin,* "to pour." The Gūrānī does not use the √*bīkh* and √*rīkh* as in NP.

Verse 3, line 1.

wātin. 1st pers. sing. pret. of infin. *wātin,* "to say."

zaid i sārā ī. Equivalent either to NP *zād i sahrā ī,* "thou art desert born," or *zaid i sahrā ī,* adopting the NP use of *zaid* in the meaning of "an one". The first interpretation appears more likely. Lk gives *zai,* R *zaid* for "born", though the infin. in all cases is *zāīn.* *-āī-* in all the L and Gūrānī dialects often becomes *-ai-* ; cf. *bain* for *bāīn,* "come here," *main* for *māīn,* "a mare."

lāf bīnāī. The equivalent of NP *lāf-zanī,* in this case meaning traduction. The word *bīnāī* is NP used idiomatically.

Verse 4, line 1.

wāt. 3rd pers. sing. pret. of infin. *wātin,* "to say."

īma, "we." Used for the singular. Common to all Gūrānī, L, and South Kur. Correct Kur *am.*

binīshīmī. Equiv. of NP *binīshīnīm,* "let us sit." Gūrānī infin. *nīshtin.* This is common to all Gūrānī, Lk, and L. Kur uses it also, but never without an adverbial prefix *dā* or *rū.* The form *-īmī* for the plural pronominal enclitic is peculiar to Gūrānī and allied dialects. The mongrel language of Kermanshah uses the form *-īmin* in this place. Lk also gives *-īma* and *-īman,* R *-īma,* Maz *-īmī.*

Line 2.

wa ham. NP *bā ham,* "together." All allied dialects use *wa* for NP *bā.* The use of this phrase is one of the many

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links between Gūrānī, and NP. Kur uses *biyek*, *layek*, *lagal*, *digal*, *tgar*, etc.

Verse 5, line 1.

rū bi rūm. A NP phrase, "face to face." This also is used by all allied dialects in common with NP. Kur has a variety of phrases of its own, such as *diberyek*, *laberyek*, etc.

kara. Imperative of *kirdin*, "to do, make." Gūrānī and allied dialects do not use the *kun* stem of NP. GuT, A, R, Kan, imperative *karo*. Kur uses stem *ka-* in place of NP *kun* and Gūrānī *kar-*, except in a few northern dialects, which also use stem *kar-*.

chanīw, and *chanī* in next line. See previous notes.

dustit, for *dūstit*, "thy friend."

Line 2.

khās, NP *khub*. This Arabic word is used by all Gūrānī and allied dialects to signify "good, well".

āwāt, "desire, wish." Verbal noun from infin. *wastin*, "to wish." As a rule the secondary stem is *wāz-*, used in ind. pres., imperative, and subj. pres. GuT, Kan, √*wāz*, Maz (Tālish) √*wē*, √*vāz*, Kur √*wē*, *wāz*, and loan-root from NP √*khwāz*, Av and OP √*vas*, Phl infin. *khvāstann*. Lk and L follow NP with √*khwās*.

wustit. 2nd sing. pers. pret. ind. from infin. *wustin*, "to throw, scatter, deposit, arrange." The use of the preterite to express the future is a well-known feature of NP and Kur. R, Kan, GuT √*wus*, √*was*, Z √*esh*, Kur √*wēzh*, √*kha*. The first Kur root and the Gūrānī, etc., invite comparison with Av √*as*, and the Kur √*kha* with Av √*ah*. The only parallel suggested in NP is *hashtan*, "to leave, let fall, suspend."

Verse 6, line 1.

bar shūm, *bar shū-m*, "should go out-to me." *Shū* is the equivalent of the NP *ravad*, from infin. *shīan*, "to go," see later.

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Line 2.

bimāla. Imp. of infin. *mālīn,* "to rub." Final *-a* in imperative is characteristic of all Gūrānī and Kur.

sīāī. NP *sīāhī,* "blackness."

Verse 7, line 1.

īma. See Verse 4, line 1.

wa. See verse 4, line 2, *wa ham.*

bo, "to, for." R uses *bo,* but most allied dialects use *wa,* NP *bi.*

wāna, "house." The loss of the *kh-* is conspicuous here. A, R, GuT, Kan *yāna.* All apparently from NP *khāna* or Phl *khānak.* Z, Maz use variants of *kad, kai,* etc., the origin of which is obvious. Kur uses *māl,*[1] the word *khānū* in Kur signifying a house built of stone or brick. It is a loan-word from NP.

Line 2.

shīmī. 1st pers. pl. pret. ind. from infin. *shīan,* "to go." Lk, L, GuT √*shū,* √*shī,* Maz √*shū,* Tālish √*shē,* Z *shē,* Kur √*chū.* A and R use √*lua*; cf. NP √*ru, rav.*

kirdmān. 1st pers. pl. pret. inf. from infin. *kirdin,* "to do." The enclitic *-mān* is as seen in L and Lk. Kermānshāhi uses it indiscriminately with *-īmin.* It is also met with in South Kur.

Verse 8, line 1.

lālām. 1st pers. sing. pret. ind. of infin. *lālāin,* "to wail, implore," an onomatopoeic in general use in Gūrānī; cf. South Kur infin. *lālīnawa,* "to wail."

Line 2.

tughrāī meshkēna. A very Persian-like metaphor, comparing the locks to the Turkish imperial sign manual of convolute letters.

[1] Nearly all writers on Kurmānjī give the derivation of *māl* as Ar *māl,* "property," for which there is no reason. It would be curious at least that Kur, which does not borrow except to fill gaps in the language, should adopt a foreign word for the commonest object of life. The derivation is Av *nmāna,* Phl. *mān.*

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Verse 9, line 1.

muruwwatan, muruwwat-an. *An-*, "it is." See specimen 3, verse 5, line 1, *kaftan.*

Line 2.

bā, "Let it be! allow!" Common to all Gūrānī and S. Kur. N.P. *bād, bādā*

bū, "that it become." From infinitive *būan*, "to become." Common to all Gūrānī and L dialects. Not in Kur.

Verse 10, line 1.

dā. 3rd pers. sing. pret. ind. of infin. *Dān*, "to strike." Apparently a loan-word from Kur, which, throughout its southern dialects, uses no other word in this meaning.

dāwā, for NP (Ar.) *da'wā*, "argument."

jastimān, "our being."

Line 2.

bar shū. See verse 6, line 1.

bēn o bastimān. A borrowed NP idiom.

Verse 11, line 2.

war dā. 3rd pers. sing. pret. ind. from infin. *war dān*, "to scatter, loose." Infin. *dān*, "to give." The word *war* is represented in a few of the Gūrānī dialects and Lk, and is possibly a loan from Kur. The L and Lk word is *nūā. War* is equivalent to Kur *ber, bar*, which is no other meaning than "front, breast," from Av *vara*, Phl *bar*, "the breast," whereas the meanings "up, on, into," etc., of the better-known NP *bar* from Av *uparō, parō*, OP *upariy*, are not found in Kur. Z also gives *ver dāe.*

bi wardā. For effect the Kur inflexion *-dā* has been borrowed. The phrase means "in front".

Verse 12, line 1.

nāshai. NP *na'sha* in its colloquial meaning "headiness, intoxication".

zānā. 3rd pers. sing, pret. ind. of infin. *zānin*, "to know." It is worthy of notice that this root √*zān* is common to all the languages and dialects used for purposes of comparison

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here, except Maz, of whose dialects *Semnānī* alone shows *√zūn*.[1] The Caspian dialects of Lenkorān and Tālish also show *√zūn*. It is interesting to note that it is supposed that Pahlavi was spoken comparatively recently in Mazānderān (not including Lenkorān and Tālish), and that Phl had changed the Av *√zan* to *√dan*.

Line 2.

pai, "for." Common to all Gūrānī, used alternately with *parī*.

Verse 13, line 1.

zāmen, "refuge." This word appears in R and A in this sense. Probably from Ar. ضامن with a difference in meaning.

zīd, "under." NP *zīr*. This change of final *r* after *ī* is seen in other instances in Gūrānī. Cf. also Z *shīd* for *shīr*. Kur does not share this peculiarity.

bizānū. NP *bidānad*. Infin. *zānin* as above.

Verse 14, line 1.

parī, "for, because." NP *barāyī*. A, R, Lk, Kan *parī*. Not used by Kur.

paikīāī, "the result, outcome." A, R, Kan use the word, which is composed of *paikī*, subsequent, and *āī*, coming.

wardish, 3rd pers. sing. pret. ind. of infin. *wārdin*, "to eat, suffer," with enclitic *-ish*. R, A, GuT, Lk, infin. *wārdin*, Z *wārde*, Av *√hvar*, Phl *√khor*.

mand. 3rd pers. sing. pret. ind. of infin. *mandin*, "to remain." Common to all Gūrānī dialects, also L and Z. Av and OP *√man*.

SPECIMEN 5.—Folio 32. Mahzūnī, a clerk of the Court of Khosrū Khān Wālī of Ardalān, A.D. 1783. A commination on the Basil in continuation of the foregoing.

Raqīb sīā bū
Rūt bi wēna i zulf i qiblim sīā bū.

[1] Semnānī appears to be a stranger among the Maz dialects.

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Ghazab je āsmān parīt awrā bū
Band bandit bi tīkh je ham jīā bū.

Bī qālib i mirda bi sar zinda bāī
Kharīk wa kharkāw ārā manda bāī.

Khudā tu nakushū parī khalāsī
Tā khās khudāī wīt bi haq bishnāsī.

Bī tor bēyu pīt tū je nāsāzī
Har dam marg i wīt b'āwāt biwāzī.

Sā ki tū hijrān i yārān selā bāī
Kāfir i mutlaq, gīr i belā bāī.

Translation

May the envious be blackened !
May thy face become black as the locks of my beloved !
May wrath from Heaven descend upon thee !
May thy stalks be sundered with a blade !
With body dead and head alive
May thou remain caught and fixed !
May God never let thee die for release
Till thou hast well recognized thy God to be the Right !
In this wise may it come to thee, that thou from thy frowardness
Shall ever long for thine own death as a desire !
Whenever thou thinkest well to separate lovers,
Absolute Infidel ! may thou be caught in misfortune !

Notes

Verse 1, line 1.

raqīb, for Ar *raghīb*, in its meaning of " envious, covetous ".

bū. NP *bishavad* ; see previous notes.

Line 2.

rūt, *rū-t*, " thy face."

wēna. See previous notes.

Verse 2, line 1.

parīt, *parī-t*, " for thee." For note on *parī*, see previous notes.

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awrā, "down, descending." A variant of *wārā*, also seen as *wālā*. R, A, Kan, Lk *wār*, *wārā*, Kur *khwār*, NP *khwār* in a different meaning.

tīkh. NP *tīgh*. All allied dialects of Gūrānī give *tīkh*.

jīā. NP *jidā*. All Gūrānī, L, and Kur *jīā*, "separate."

Verse 3, line 1.

bāī. NP *bāshī*, from infin. *bīan*, "to be." This is characteristic of L, Lk, A, R, Kan, and GuT, also Kermānshāh mongrel dialect. Not Kur.

kharīk, "caught, involved." A loan-word from Kur. Most of the Gūrānī dialects use it. L, Lk use mutilations of Ar *mashghūl*.

kharkāw. This is the intensive form of *kharīk*. *Kharīk wa kharkāw* is a phrase borrowed from Kur, meaning "utterly involved", "inextricably caught or stuck".

ārā, "arranged, fixed." Cf. NP *ārāstan*, with a slightly different modern meaning.

Verse 4, line 1.

nakushū, "may he not kill." The line reflects upon the duration of the torment prayed for in the previous line. The enclitic *-ū* in 3rd pers. sing. is common to all Gūrānī and Lk, but is not used in Kur. It is also seen in the quatrains of Bābā Tāhir of Hamadan.

Line 2.

wīt, "thyself." This is one of the characteristic Gūrānī words. The reflexive pronoun throughout its six persons is *w-* in place of NP *khud*, Kur *kho*, Kan, R, A, GuT, L *w-*, Z *kho*, Av *hvā*, *khvā*, OP *uva*, Phl *khud*.

Verse 5, line 1.

bēyu. NP *bishavad*, "may it become," for *bibū*. It is characteristic of Gūrānī and allies. Kur *bibē*, *bē*.

pīt, "to thee," *pai-t*. Common to all Gūrānī, also Kermānshāhī, Lk, L.

āwāt. See Specimen 4, Verse 5, line 2.

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biwāzī. NP *bikhwāhī*. Characteristic absence of *kh-* from infin. *wastin*, "to wish." All Gūrānī dialects show variations of √*wā* and √*wāz*, in common with Kur. √*wa*, √*wāz*, √*wēs*. Z *wēsh*. The initial *kh-* of NP is seen in Phl √*khvās*, cf. L √*khās*, and Kermānshāhī √*twās*. Av √*vas*, OP √*vas*, which Kur, Gūrānī, and Z appear to have perpetuated regardless of Phl.

Verse 6, line 1.

selā, for Ar *ṣalāḥ*, in the meaning "desiring, seeing good".

SPECIMEN 6.—Folio 33, by Mahzūnī, 6 couplets.

Sāī sahand ī sang
Subhdam washan sāī sahand i sang.
Bilā shartī raqīb i bad rang
Naganu na wandit sad hazār farsang.
Chanī dūst i wīt binīshī bi shād
Werda i sālān bāwarī bi yād.
Ga nīāz je tū gā nāz je dilbar
Tū pai ū sūzān ū je tu batar.
Har tā ki umrit yāwū bi anjām
Na sāī o sangdā wa yārī ayām.
Īdan sarmāya i īdinyā i fānī
Mā baqā pūchan ar chīw mazānī.

Translation

In the shade of a beautiful rock,
Early morning is pleasant in the shade of a beautiful rock.
Conditionally that the evil-hued envier
Approach thee not within ten thousand farsangs.
With thine own lover to sit in happiness
The tales of the years to bring to mind.
Sometime advances from thee, then coyness from the beloved,
Thou burning for her, and she yet worse than thee.
And so till thy life arrive at its end,
In the shade of the pleasant rock with the beloved (spending thy days).

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This is it—the capital of the transient world;
All else is hollow, didst thou but know.

Notes

Verse 1, line 1.

sāī, sāi-i, "the shade of."

sahand. A loan-word from Kur, meaning "a place well endowed with trees, water, and coolness". In Kur as here only applied to a pleasant nook or outlook in a hill.

Line 2.

washan, wash-an, "it is pleasant." For *an,* see previous notes. *Wash,* with characteristic initial *w-*, where NP shows *khw-*, is common to all Gūrānī, also Z.

Verse 2, line 2.

naganū. Cond. "that he arrives not," from infin. *gain,* "to arrive," a very unusual word in Gūrānī. Cf. Kur *gaishtin,* "to arrive," not the same theme as NP *gashtan,* but *ga,* "a place," + √*sh,* "go."

na, "to," see previous notes.

wandit, wand-it, "thy neighbourhood." This meaning is quoted on the authority of an Aorāmānī poet at present in Sulaimania, who, however, cannot produce any parallels in other dialects.

Verse 3, line 2.

werda, "the things past." Although this is probably a loan-word from Kur, it is interesting to note the etymology. The Kur √*būr,* "pass over, away," and the NP √*guzar,* show the different developments in two parallel languages. Av gives *vī,* "apart," and *tar,* "across, over." In Phl this has become *vīḍar,* and also, with the characteristic *v to g* change of Phl, *gūḍar.* Kur has preserved the Av *vī-tar* with erosion, and disappearance of medial *d* softened from *t* (one of its commonest features), while NP shows its descent from Phl by adoption of the typical Phl *g-* for Av *v-* with *gū-dar, gūzar.*

bāwarī, "that thou may bring." All Gūrānī dialects preserve the full √*āwar* throughout the verb, not using

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the abbreviated √*ār* of NP. Not used in Kur, which has its own √*ēn*, √*ān*, √*īn*, √*hēn*.

Verse 4, line 1.

gā. NP *gāh*, "time."

Line 2.

batar, "worse." Cf. Phl *vatar*.

Verse 5, line 1.

yāwū. Aorist, infin. *yāwān*, "to arrive." Common to R, A, GuT, Kan. Comparison with Av *ā-*, √*ī* is suggested.

sangdā. Use of the Kur dative *-dā*.

wa yārī, "with a friend."

Verse 6, line 1.

īdan, "this is." The use of the apparently euphonic *-d-* between *ī*, "this," and *an*, "is," is characteristic of Gūrānī and L.

Line 2.

pūchan, "is empty, vain."

ar chīw. NP *agarchi*, though not used in exactly the same sense. The phrase *ar chīw mazānī* is idiomatic in Gūrānī.

mazānī. 2nd pers. sing. ind. pres. of infin. *zānin*, "to know."

SPECIMEN 7.—Folio 34. Farrukh Palangānī. Three verses

Maūlām bīqarār
Sipī tāfī dīm bī hadd i bī qarār.

J'o māh i barza wīsh mawazū wa wār
Tan pāra mabū hazārān hazār.

Dīsān je gūldā makhurōshīwa
Chani dākh i ishq majōshiwā.

Translation

My master! Confusion!
I saw a white spate, unlimited and unruled.
From that high moon it threw itself downwards,
Becoming body-rent in thousand thousand (pieces).

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Then, again upheaving in the pool,
With the pain of love boiling.

Notes

Verse 1, line 1.

maūlām. This address as an introduction is common to Gūrānī poems, and it is said means little more than the introductory *b'ismillah* of NP words. In a case such as the present the first line is but the name of the poem, *bī qarār*, "Unsettlement, Confusion."

Line 2.

sipī. NP *sipīd*, *sifīd*. The *-t* of Av and *-d* of Phl have been lost by Gūrānī and Kur alike.

tāf. See Specimen 1.

dīm. 1st pers. sing. pret. ind. of infin. *dīan*, "to see."

Verse 2, line 1.

j'o, *je-o*, "from that."

wīsh, "itself." See previous note on *wīt*.

mawazū. 3rd pers. sing. pres. ind. of infin. *wustin*, "to throw, etc." See Specimen 4, verse 5, line 2.

wa, "to."

wār, "down." See Specimen 5, verse 2, line 1.

Line 2.

mabū, "it becomes." See previous notes on *būan*.

Verse 3, line 1.

dīsān, "once again." A Kur loan-word, compound of *dī*, "again," and *sān*, "manner." Gūrānī usually employs *duwāra*, *dujāra*, *dītir*, etc.

gūldā. Locative of *gūl.* Kur inflexion borrowed.

makhurōshīwa. More correctly *makhurōshüa*, from infin. *khurōshin*, "to be tumbled, confused." Cf. NP *khurūshīdan* in a different sense, that of "noise, tumult".

Line 2.

majōshīwa, or *majōshüa*, from *jōshīn*, "to boil."

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The Minor Friars in China

By A. C. MOULE

IN July, 1914, the *Journal* printed the Latin text, with English translation, of various documents relating to the Minor or Franciscan Friars in China. Of these the most important were three letters written from China and other extracts from a fourteenth century chronicle, which is preserved in the Bibliothèque Nationale at Paris (MS. Latin 5006). On p. 555 of the article referred to I wrote: "Monsieur H. Cordier tells me that he knows of no other copy of the Chronicles, but at the same time is inclined to doubt that the Paris MS. (Latin 5006) is the copy used by Wadding." Wadding, readers may be glad to be reminded, was the author of a great work called *Annales Minorum*, in which the three letters from China were printed for the first time, and, indeed, for the only time until 1914 from a manuscript. All the other Latin texts with which I am acquainted and all the versions are obviously based on Wadding's text. In spite of M. Cordier's opinion I continued to think that it was at least possible that Wadding had copied rather carelessly the MS. which is now at Paris.

It was then a shock to me to learn from Professor Pelliot that the letters in question and the Paris MS. had been dealt with before 1914 by Jerome Golubovich, and, on turning to the latter's work, to find that the actual MS. used by Wadding was still preserved at Rome.

What Golubovich has to say will be found in his *Biblioteca Bio-bibliografica della terra santa*, etc., tom. ii, 1913, pp. 116–142, which appeared after M. Cordier's new edition of *Cathay and the way thither* was in print. Very briefly summarized, his opinion is that he can prove that Wadding did not use the Paris MS. Latin 5006—had not, indeed, seen it—"but another codex now almost unknown which is kept in the

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private library of the Chigi at Rome." This Chigi MS., which is marked I, vii, 262, is, Golubovich says with repeated emphasis, identical with Wadding's text. After quoting one of the most difficult passages in the second letter of John of Monte Corvino (July, 1914, p. 555), he says: "Tutto questo passo è letteralmente identico nel Waddingo" (p. 140), and again, after dealing with Andrew's letter (July, 1914, pp. 564–567), "identica è nel Wadd." (p. 141). Golubovich devotes pp. 131, 2, 3, 7 to a collation of the Paris MS. with Wadding's text, and then gives a careful summary of the contents of the Chigi MS. with many quotations (pp. 139–141), and of a copy of the same Chronicle dated 1586, which is in the Corsini Library at Rome (p. 142).

Golubovich's reading of the Paris MS. is often different from my own, but after showing the rotographs with which I worked in 1914 to Mr. A. Rogers of the University Library at Cambridge, I am satisfied that there is only one place where the text printed in 1914 need be changed, with possibly one or two other words which are practically illegible. Having had my suspicions of Golubovich's accuracy thus aroused, I naturally wanted to see the Chigi text for myself, and now, through the quite extraordinary kindness of Mr. J. A. Twemlow and the courtesy of the Librarian, rotographs of the necessary pages have been obtained. And the text is so wonderfully different from what Golubovich supposed, that it seems to be well to print it entire. It is as follows:—

MS. CHIGI I, VII, 262, fol. 98r°.[1]

FRater uero Johannes de ipso ordine minorum de monte coruino Apulie cum litteris, & priuilegijs domini pape in persidam perueniens, & de Taurisio ciuitati in indiam

[1] See *Journal* for July, 1914, pp. 546–51; *Annales Minorum*, vol. iii, 1636, pp. 44, 5 (or 2nd ed., vol. vi, pp. 69, 70). In the footnotes the Paris MS. Latin 5006 is called *P.*, and Wadding *W*. Except in the second letter, not nearly all the various readings of *P.* and *W.* are noted; and when the two agree in word, the spelling of *P.* is given. I am immensely indebted to Mr. Rogers, who has most kindly taken the trouble to read through and correct my transcript.

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pertransiens deinde in regnum Kathay[1] in Gabaliensem vrbem perueniens, imperatorem maximum omnium Tartarorum cum litteris domini pape ad fidem xristi inuitauit, & ab ipso letanter receptus locum ei, & sedem in curia concessit, & predicandi licentiam concessit. Qui multos ibi ad xristum conuertit sicut in sequenti epistola declarat. Epistola

REuerendis in xristo patribus, & fratribus &cetera. Ego frater Johannes de monte coruino de ordine fratrum minorum recessi de Taurisio ciuitate persidis anno domini 1291, & fui in contrata indie, & in ecclesia sancti Tome mensibus xiij. & ibi baptizaui circa centum personas in diuersis locis. Et sotius uie mee fuit frater Nicolaus de pistorio ordinis fratrum predicatorum qui mortuus est ibi, & sepultus in predicta ecclesia. Et ego ulterius procedens perueni in Kathay regnum imperatoris tartarorum, qui dicitur magnus chan. Jpsum uero imperatorem cum litteris domini pape ad fidem catholicam inuitaui, qui tamen quia nimis inueteratus est in ydolatria non potui reducere. set multa beneficia prestat xristianis. Et ego sum apud eum iam est annus xij^us. Nestoriani xristiani quidem titulum preferentes, set a xristiana religione plurimum deuiantes tantum inualuerunt in partibus istis quod non permiserunt quempiam xristianum alterius ritus habere quantumlibet paruum oratorium. nec aliam quam nestorianam puplicare doctrinam. Ad has siquidem terras non aliquis apostolus, uel apostolorum discipulus peruenit Et ideo prefati nestoriani per se uel per alios pecunia corruptos persecutiones mihi grauissimas intulerunt. asserentes quod non essem missus a domino papa. set essem explorator magus, & dementator hominum. Et facto aliquo temporis interuallo produxerunt alios falsos testes dicentes quod alius numptius fuerat missus deferens imperatori maximum thesaurum. & quod ego illum occiderim in india, & abstulerim que portabat. Et durauit

[1] The initial of Kathay is in most cases almost identical with R, and the word ought perhaps to be printed Rathay.

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hec machinatio circiter quinque annis. ita quod sepe ad iudicium fui tractus cum mortis ignominia. Tamen per quorundam confexionem deo disponente, Jmperator cognouit meam innocentiam, & malitiam emulorum & ipsos cum vxoribus, & liberis exilio relegauit. Jn hac peregrinatione fui sine confexione annis xj donec ad me uenit frater Arnoldus Alamannus de prouincia colonie nunc est annus secundus. vnam ecclesiam edificaui in ciuitate Cabaliech, vbi est precipua residentia regis, quam ante annos sex compleui. vbi etiam feci campanile, & ibi tres campanas posui. Baptizaui etiam ibidem usque hodie ut extimo circa sex milia personas. Et nisi fuissent supradicte infamationes baptizassem ultra xxx milia, & sum frequenter in baptizando. Jtem successiue emi quatraginta pueros filios paganorum etatis circa .vij, et xj annorum qui nullam adhuc cognoscebant legem, & baptizaui eos, & informaui eos litteris latinis. & ritu nostro scribens eis psalterium cum ymnarijs triginta duo [1] breuiaria scripxi, . . Ex quibus xij pueri iam sciunt officium totum nostrum, & tenent chorum, & edomadas sicut in conuentu, siue sim presens, siue non Et plures ex eis scribunt psalteria, & alia oportuna, & dominus imperator delectatur in cantu eorum. Campanas ad omnes horas pulso & cum conuentu infantium quasi lactentium officium facio. Tamen secundum consuetudinem cantamus quia notatum officium non habemus

[*Margin:* De magno rege Georgio xristiano :

QVidam Rex illius regiones Nestoriane secte nomine Georgius de genere illius regis magni qui dictus fuit presbiter Johannes primo anno quo huc veni mihi adhesit. & ab errore ad ueritatem uere fidei conuersus catholice per me minores ordines suscepit. mihique celebranti sacris [2]

[1] *P.* : Item emj successiue .xl. pueros filios paganorum etatis infra .vij. et .xj. annorum qui nullam adhuc congnoscebant legem. & batticzauj eos & informauj eos litteris latinis & ritu nostro. & scripssi pro eis psalteria cum ymnarijs .xxx. & duo *W.* : Item enim successiue 150. pueros, filios paganorum ætatis infra 7. & 11. annorum, qui nullam adhuc cognoscebant legem, & baptizaui eos, informaui eos litteris Latinis, & Græcis ritu nostro, & scripsi pro eis psalteria, cum hymnariis 30. & duo

[2] *W.* regiis

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uestibus indutus ministrauit, ita quod alij nestoriani ipsum de apostate[1] accusauerunt. Tamen ipse magnam sui populi partem ad ueram fidem catholicam adiunxit. & ecclesiam pulcram se cum regiam magnificam construxit ad honorem dei nostri, & domini pape. & nomine meo uoca[n]s ecclesiam romanam. Qui nobilis rex[2] ante sex annos migrauit ad dominum relicto herede filio in cunabulis, qui nunc est annorum Fratres tamen ipsius regis cum essent perfidi in erroribus omnes quos ipse conuerterat, post regis obitum subuerterunt.[3] Et quia ego fui solus non potui recedere a prima ecclesia, & ab imper[at]ore chan. & ad illam ecclesiam que distat per xxx dietas non potui accedere. Tamen si uenerint boni coadiutores spero in deo quod totum poterit reformari. Nam adhuc habeo priuilegium predicti regis defuncti.[4]

ITerum dico quod si non fuissent infamationes supradicte magnus fructus fuisset sequtus, si habuissem duos uel tres sotios coadiutores meos, & forte imperator fuisset baptizatus Tales fratres uenient, si uenire aliqui uolunt qui studeant se in exemplum dare, & non suas finbrias magnificare. De uia notifico quod per terram Chothay canis imperatoris aquilonarium, & securior,[5] ita quod cum numptijs

[1] *P. W.* Apostasia

[2] *P.* adduxit. Et ecclesiam pulcra[m] secundum Regiam magnificentiam construxit. ad honorem dej nostrj sancte trinitatis; & dominj pape. & nomen meum vocans eam ecclesiam Romanam. Qui Rex Georgius *W.* adduxit, & Ecclesiam pulchram secundum regiam magnificentiam construxit, ad honorem Dei nostri, sanctæ Trinitatis, & Domini Papæ, vocans eam Ecclesiam Romanam. Qui Rex Georgius For *nomen meum*, words which are very obscure in *P.*, Golubovich reads *nominavit*.

[3] To the above 27 words *P.* adds 9 (uerus xpistianus, nouem, Georgij, Nestorij, ad scisma pristinum reducendo), all of which *W.* has copied exactly.

[4] *P. W.* Et quia ego fuj solus nec potuj recedere ab Jmperatore Chaan ire non potuj ad illam ecclesiam que distat ad .xx.. dietas. Tamen si uenerint aliquj boni coadiutores & cooperatores spero . . . Nam . . . Regis Georgij defunctj.

[5] *P.* Cothay Jmperatoris aquilonarium tartarorum est via breuior & securiorum. *W.* Gothorum Imperatoris Aquilonarium Tartarorum est via breuior, & securior; The omission of *Tartarorum . . . breuior* from the text looks like an accident, and leaves the sentence imperfect.

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infra quinque uel sex menses poterunt peruenire. Via autem alia est longissima, & periculosissima habens duas nauigationes quarum prima est secundum distantiam inter Achon, & prouinciam prouincie. Alia uero est secundum distantiam inter Achon, & Angeliam,[1] & posset contingere quod in biennio vix perficeret uiam illam. quia prima uia secura non fuit a multo tempore propter guerras Jdeo sunt xij anni quod de curia romana. & de nostra religione rumores, & noua non recepi.[2] Jam sunt [fol. 98 v°] duo anni quod venit quidam medicus ciruicus [3] qui de romana curia, & nostro ordine, & statu occidentis populi xristiani istas partes incredibilibus blasfemijs inffecit propter quod multum desidero percipere ueritatem. Rogo fratres ad quos littera hec peruenerit [4] ut ita studeant quod eius continentia possit peruenire ad notitiam domini pape, & cardinalium, & procuratoris nostri ordinis in curia romana. Ministro generali ordinis nostri supplico pro antiphonario, & legendis sanctorum graduali, & psalterio cum nota pro exemplari, quia non habeo nisi breuiarium portatile cum lectionibus breuibus, & paruum missale. Si habuero exemplaria pueri predicti scribent. Modo sum in actu edificandi aliam ecclesiam, &[5] diuidendum pueros in pluribus locis. Ego iam senui. & canus factus sum, potius laboribus, et tribulationibus quam etate. sunt [6] enim annorum lviij. Didici conpetenter linguam, & litteras tartarorum [7] que est lingua vsualis tartarorum. & iam trastuli in lingua illa & littera totum nouum testamentum, & psalterium que feci scribi in pulcerrima littera eorum. & teneo, & lego in patenti. & manifesto quasi in testimonium [8] legis xristi. Et tractaui cum supradicto rege

[1] *P.* Angliam.

[2] *P. W.* de nostro ordine & statu occidentis non suscepi noua.

[3] *P.* Cyrugicus lombardus *W.* chirurgicus Lombardus, The word in the text is hard to read, and may be *ciriuricus* or *ciriacus*.

[4] *or* perueniet

[5] *P. W.* ad

[6] *P. W.* sum

[7] *P. W.* Tartaricham

[8] *P.* teneo & lego & predico in patenti & manifesto quasi in testimonium *W.* scribo, & lego, & prædico in patenti manifesto in testimonium

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georgio si vixisset totum officium latinum trasferre ut per totam terram suam cantaretur in dominio suo Et eo viuente in ecclesia sua celebrabatur missa [1] secundum ritum latinum in littera, & lingua illa tam verba canonis quam prefationes. Et filius dicti regis Georgij uocatur Johannes propter nomen meum. de quo spero in domino quod adhuc immitabitur [2] uestigia patris sui. Credo secundum visa, & audita quod nullus rex, aut princeps mundi domino chan imperatori omnium tartarorum potest equari [3] in latitudine terre, in multitudine populi & magnitudine diuitiarum. Finis. Datum dicebat littera ipsa in ciuitate cambaliech regni Kathay, anno domini millesimo ij^{c}.v.[4] die viij mensis Januarij.

HAs litteras[5] trasmisit frater Johannes predictus cuidam fratri predicatori spirituali, & bono viro qui zelo fidei xristiane, & salutis animarum in partibus orientalibus peregrinabatur indicando gentibus, & baptizando. Et iste frater per quosdam mercatores de uenetijs qui a Tartaria redibant trasmisit has litteras in pluribus locis citra mare, & in partibus occidentis fratribus minoribus, & predicatoribus. Et hic frater significauit in suis litteris quod plures fratres predicatores qui litteras grecas tartaricas, & linguas optime didicerant & adi[r]e tartarina parauerunt portantes libros, & calices, & paramenta. Et illi mercatores veneti dederunt predicto fratri predicatori in signum ueritatis huius tabulam descriptam magni chan imper[at]oris. Et fratres predicti ceperunt viam, & peruenerunt usque Gazariam tartarorum aquilonarium. set non potuerunt transire propter guerras. vnde in eadem ciuitati permanserunt predicantes & baptizantes ibidem quousque guerra cessaret

[1] *W.* celebrabam missam

[2] *P. W.* & spero in deo quod ipse imitabitur

[3] *P. W.* Secundum uero audita & uisa credo quod nullus Rex nec princeps in mundo possid equari domino Chaan

[4] *P. W.* Data. in ciuitate Cambaliech Regni Katay (*W.* Catan). anno dominj m°. ccc v°

[5] For this paragraph of the Chronicle compare July, 1914, pp. 551, 2.

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ET dum rumor felix, & gaudio plenus per occidentales ecclesias, & ad ordines fratrum minorum, & alios peruolaret, & fratres quam plurimi incitati diuino spiritu ad predicandum tartaris —arent, frater iohannes uerus dei seruus secundas litteras trasmisit ad vicarios fratrum orientis, ita continentes. Copia littere [1]

REuerendis in xristo patribus fratri + vicario generalis ministri, ordinis fratrum minorum. & vicario magistri ordinis fratrum predicatorum, & fratribus omnibus ordinis [2] utriusque in prouincia persarum manentibus. Frater Johannes de monte coruino de ordine minorum inutilis xristi seruus predicator fidei xristiane, & sancte romane ecclesie. & apostolice sedis numptius salutem, & caritatem in eo qui est uera caritas, & omnium salus.[3] Ordo exigit caritatis [4] ut longe, lateque distantes, & maxime qui perigrinantur pro lege xristi cum reuelata facie se inuicem intueri non possint,[5] saltim verbis & litteris consolentur. Cogitaui uos non sine causa mirari, quod tot annis prouincia tam longinqua consistens [6] nunquam meas litteras recepistis. Set miratus sum non minus [7] quod nunquam nisi anno isto recepi ab aliquo fratre uel amico litteram, nec [8] salutationem, Nec uidetur quod aliquis mei recordatus fuerit,[9] & maxime quia audiui ad uos peruenisse rumores [10] quod ego mortuus essem. Nunc autem notifico vobis quod anno preterito in principio

[1] Compare *Journal* R.A.S., July, 1914, pp. 552–7 ; *Annales Min.*, tom. iii, pp. 45, 46, 60 ; 2nd ed., tom. vi, pp. 71, 72, 91.

[2] *P.* Reuerendo in xpisto Patri . . ffratrj. ffratrj. vicario . . . Et vicario fratrum & magistri ordinis predicatorum. & fratribus ordinum utriusque. *W. Reuerendo in Christo Patri Fratri N. N. Vicario generali Ministro Ordinis Fratrum Minorum, & Vicario fratrum & Magistro Ordinis Prædicatorum, & Fratribus ordinis vtriusque*

[3] *P. W.* fidej sacre xpistiane. legatus & nuntius sedis apostolice Romane . . . salus omnium.

[4] *W.* Ordo eximiæ charitatis inuitat,

[5] *P. W.* uidere non possunt

[6] *W.* consistentes,

[7] *W.* Sed & ego miratus sum,

[8] *P.* litteram uel *W.* litteras, vel

[9] *P. W.* recordatus fuerit mej.

[10] *P. W.* quia (*W.* quando) audiui quod rumores ad uos peruenissent

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Januarij per quendam amicum meum[1] qui fuit ex sotijs domini Cothay canis qui uenerunt ad dominum Chan de Kathay,[2] ego misi litteras patri vicario, & fratribus prouincie Gazarie de statu, & conditione mea in paucis verbis.[3] in quibus litteris rogaui eundem uicarium quod exempla illarum uobis trasmicteret.[4] Et iam mihi constat per bonas personas quod[5] nunc peruenerunt cum numptijs predicti domini chanis cothay ad dominum chanem Kathay[6] quod mee littere peruenerunt, & quod ille idem numptius qui portauit litteras meas postmodum de Sara uenit[7] Taurisium propter quod de factis, & contentis in illis litteris[8] cogitaui non fore necesse[9] iterato scribere. Et primum est de persecutione nestorianorum. Secundum de ecclesia, & domibus completis vbi picture facte sunt[10] ueteris, & noui testamenti. Et ad doctrinam rudium scripta sunt litteris persicis tarsicis, & latinis[11] vt omnes lingue legere ualeant, & inteligeren ationes diuerse.[12] Tertium est quod ex pueris nutritis & baptizatis[13] aliqui migrauerunt ad dominum Quartum est quod a tempore quo fui in tartaria in Kathay[14] baptizaui iij millia.[15]

[1] *P. W.* nostrum

[2] *W.* Kathan Chamis, qui venerat ad eundem Dominum Chamem,

[3] *W.* mea, paucis verbis exaratas,

[4] *P.* transmitterent [?].

[5] *P.* iam mihi per bonas personas que *W.* iam intellexi per aliquas personas, que

[6] *P. omit* chanis ; *read* de Cathay. *W.* Domini de Kathan ad Dominum Chamem,

[7] *P. W.* Sara ciuitate uenit (*W.* venerit)

[8] *W. omit* litteris

[9] *P. W.* non facere mentionem nec

[10] *P. W.* vj (*W.* Sex) picturas feci fieri It seems to be quite possible that *ubi* is the true reading. *Six* is an inadequate number, and no number is named by the Pope (*cf. JRAS.*, July, 1914, p. 560, quod ecclesias construxerit. & picturas noui et ueteris testamenti *in eis* depingi fecerit ; and below p. 98. *In qua* . . . ystorie noui, & ueteris testamenti ad doctrinam rudium depingi). This, of course, assumes the possibility that Chigi is independent of *P.*

[11] *P. W.* testamenti. ad doctrinam rudium. & scripta (*W.* sculpta) sunt litteris latinus. Tursicis (*W.* & Tarsicis). & persicis

[12] *P. W. omit* & . . . diuerse. [13] *P. W.* pueris quos emj & battizauj

[14] *W. omit* in Kathay [15] *P.* plura milia *W.* vltra quinque millia

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Jn isto autem anno m.[1] iij^{c}. v^{o} ego incepi unum[2] alium locum nouum coram hostio domini chanis. & inter curiam, & locum tantum[3] via sola est distans per iactum lapidis a porta domini chanis. dominus petrutius de lucagango noster mercator fidelis qui fuit meus sotius de Taurisio emit[4] terram pro loco quem dico,[5] Et debit mihi amore[6] dei, & diuina gratia operante. quia in imperio domini canis non posset haberi locus utilior, & congruentior pro sancta ecclesia[7] catholica construenda in principio agusti locum accepi, &[8] usque ad festum Sancti Francisci fuit completus cum muro in circuitu, & officinis, &[9] oratorio qui[10] est capax cc personarum. Set propter yemem ecclesiam perficere non potui. Set habeo ligna congregata in domo. & per misericordiam dei, perficere intendo[11] in estate. Dico uobis quod mirum quoddam uisum est omnibus aduenientibus de Custate,[12] & aliunde quia non habebant adhuc rumores ex hoc, & uidentes locum[13] de nouo factum, & crucem rubeam desuper in sublimi positam.

ET nos in oratorio nostro secundum vsum officium cantamus sollempniter. quia notas non habemus.[14] Dominus kanis in camera sua vbi dormit[15] potest audire uoces nostras. Et hoc factum mirabile diuulgatum est longe, lateque.[16] & pro magno erit, sicut disponet[17] diuina clementia. A prima

[1] *P. W. add* domini [2] *W. omit* unum [3] *P. W.* nostrum
[4] *P. W.* Dominus Petrus de lucalongo (*W.* Lucolongo) fidelis xpistianus & magnus mercator qui fuit sotius meus de thaurisio ipse emit
[5] *P. W.* dixi [6] *W.* pro amore
[7] *P. W.* quia (*W.* puto quod) utilior & cogmentior locus haberi non posset (*W.* possit) in toto imperio dominj Chanis pro ecclesia
[8] *P. W. add* assistentibus benefactoribus & iuuantibus
[9] *P.* & domibus officinis planis. & *W.* & domibus, officinis, plateis &
[10] *P. W.* quod [11] *P. W.* perficiam [12] *P. W.* ciuitate
[13] *W.* qui adhuc non audierunt quidpiam de hoc : videntes enim locum
[14] *W.* vsum (quia notas adhuc non habemus) officium cantantes solemniter amplius admirati sunt. Quando cantamus :
[15] *P. W. omit* vbi dormit
[16] *P. W.* mirabile factum longe lateque diuulgatum est inter gentes.
[17] *P. W. add* & adimplebit

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uero [1] ecclesia, & loco nostro usque ad istam [2] secundam [3] sunt duo miliaria & dimidium,[4] & pueros diuisi in partem. partem [5] in prima, & [6] partem in secunda constitui. & faciunt officium per se ipsos. Set ego sicut capellanus per edomadas celebro in utraque [7]

DE regionibus orientalibus [8] uobis significo, & precipue de imperio domini kanis quod non eo maior [9] in mundo Et ego habeo in curia [10] locum, & viamordinariam sedend i, & intrandi [11] sicut legatus domini pape. & me habet [12] super omnes alios prelatos quocunque nomine censeantur. Item licet predictus [13] dominus kam audierit multa magna de curia romana, & statu latinorum, desiderat tamen multum uidere numptios uenientes de partibus illis. Jn partibus istis [14] sunt multe secte [15] ydolatrarum [16] diuersa credentium. igitur [17] multi religiosi de diursis sectis, diuersos habitus habentes, sunt [18] multo [19] maioris autoritatis [20] [fol. 99r°] & obseruantie [21] quam sint [22] religiosi latini ;

DE india maiorem partem ego uidi [?] & quesiui de alijs partibus indie. Et esset magnus profectus predicare eis [23] si fratres venirent. Set non essent mictendi nisi viri solidissimi. Nam regiones sunt pulcerrime plene aromatibus, & lapidibus pretiosis. Et fertiles.[24] set de nostris fructibus [25] parum habent. Et propter temperiem, & calorem quasi

[1] *P. W. omit* uero [2] *P. W.* ecclesiam
[3] *P. W. add* quam edificauj postea
[4] *P. add* intra ciuitatem. que multum est magna. *W. add* intra ciuitatem, quæ valdè magna est,
[5] *P. W.* diuisi & posuj partem [6] *W. omit* &
[7] *P. add* quia puerj non sunt Sacerdotes. *and rubric* de magno imperio tartarorum. *W. add* quia inter hos pueros non sunt Sacerdotes.
[8] *P.* orientalium [9] *P.* sit ej maior *W.* sit eo maius
[10] *P. W. add* sua [11] *P. W.* intrandi & Sedendi
[12] *P. W.* honorat me [13] *P. W.* Et licet ipse
[14] *P. W.* istis partibus [15] *P.* septe and so in all cases
[16] *W.* idololatrarum [17] *P. W.* et sunt
[18] *P. W.* & sunt [19] *W. omit* multo
[20] *P. W.* austeritatis. The text has & obseruantie, like a catch-word at the foot of the page.
[21] *W.* abstinentiæ [22] *P. W. omit* sint [23] *P. W. add* fidem xpisti
[24] *P. W. omit* Et fertiles. [25] *P. W.* fructibus nostris

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continuum nudi, & discalciati incedunt, & propterea artibus, & artificijs non indigent. Ego baptizaui ibi circa c. personas Jbi semper est estas, & nunquam hiems.[1] Jtem dicit dictus frater Johannes in quadam sua epistola .quod numptij[2] uenerunt sibi ex ethiopia rogantes amore dei ex parte illorum a quibus missi erant ut ibi ad predicandum iret uel micteret. Nam postquam B. matheus ibi fuit & discipuli eius propter hostiles incursus populi consumti, & dispersi sunt. & sic defecit ecclesia fidelium. Et qui remanserant predicatores non habuerunt qui eos instruerent Et quia multum desiderant redire ad fidem xristi quam antiqui eorum tenuerunt, omnes conuerterentur si predicatores irent [?] de romana ecclesia qui eos docerent. Et dicit in eadem epistola quod post festum omnium sanctorum baptizauit cccc. personas. Et quia ipse audiuit quod plures fratres vtriusque ordinis ad persas, & ad Gazariam accesserant ortatur eos ad predicandum feruenter fidem. Data in chambalieth ciuitate uetere Katay anno domini. 1306 in domínica quinquagesime[3]

[1] *P. W.* propter magnam temperantiam & caliditatem aeris & regionis nudi uadunt. modico coopertorio (*W.* medio corpore) uerenda cooperientes. Et propterea artibus nostris sartorum & cordonum. & artifitijs non indigent. Jbj (*W.* quibus) est semper estas & nunquam hyemps Battizauj ibj circa centum personas. Wadding adds (after personas) &c. *Deest finis.* Alia dabimus huius argumenti anno 1307. quo creatus est Archiepiscopus.

[2] *P.* In eadem epistola dicit ipse frater Johannes. quod sollempnes nuntij *W.* Vltra ea quæ scripsit anno superiori Fr. Joannes à Monte Coruino (inquit B. Odoricus) hoc anno narrat in alia à se scripta Epistola, quod solemnes Nuncij

[3] *P. W.* venerunt ad eum de ethyopia (*W.* quadam parte Æthiopiæ), rogantes ut illuc pergeret ad predicandum uel mitteret predicatores bonos. Quia a tempore Beati Mathej euangeliste & discipulorum eius. predicatores non habuerunt qui eos instruerent in fide xpisti. & multum dessiderant ad ueram xpisti fidem peruenire. Et si fratres ibj (*W.* illuc) mitterentur omnes conuerterentur. ad xpistum. & fierent ueri xpistianj. Nam sunt plurimj in oriente (*W.* ciuitate) qui sollo nomine cristiani dicumtur. & in (*W. omit* in) xpistum credunt. Set de scripturis & sanctorum (*W.* sanctis) doctrinis aliud nesciunt (*W.* non sciunt) simpliciter uiuentes cum non habeant predicatores & doctores. Item dicit (*W.* dixit) ffrater Johannes quod post festum omnium sanctorum battizauit .cccc. (*W.* quadrigentas) personas. & quia (*W.* quod) ipse audiuit quod plures fratres utriusque ordinis ad persas & ad (*W. omit* ad) Gaczariam accesserunt ortatur (*W.* hortantes) eos ad predicandum feruenter fidem dominj nostri Jhsuxpisti. & ad

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The problem of these last sentences is perplexing. YULE, who seems to have used no text but Wadding's second edition, was sure that the passage from *Item dicit dictus frater* to the end was really the end of the second letter, and his view is, of course, confirmed by *P.*, which, without any break, introduces the passage with "Brother John himself says *in the same letter*". That Wadding should have closed the first part of this second letter with "*The end is missing*" makes it, at first sight, unlikely that he had seen or used *P.*; but he may mean no more than that the actual text of the letter after that point is lost; and when it suits him, fifteen pages later, to introduce the substance of the lost sentences as reported by *P.*, he does so with the words: "Besides what Brother John wrote the year before [viz. 1305], he tells this year [viz. 1306] in another letter which he wrote that . . .,"[1] and he then proceeds to copy *P.* very nearly, both in the letter (p. 94, note 3) and in the paragraphs which follow it (p. 109 below).

In the Chigi text this passage follows the first part of the letter without even the break of a new paragraph (as in *P.*), beginning with "Likewise the said Brother John says in a certain letter of his", words which leave us in doubt whether the scribe thought it belonged to the same letter or not. The substance of the sentences which follow is the same as in *P.*, but the words, except in two sentences, are very different. It looks as if the writer had copied, or perhaps had made for himself a summary of the last sentences different from that in *P.*, or had tried to reproduce *P.* just here from memory. The Chigi text has 131 words, *P.* 153, *W.* 167; or, omitting the introductory words before *quod*, the numbers are Chigi 122, *P.* 146, *W.* 147. This one passage is sufficient

faciendum fructum animarum. Data dicebat littera. ipsa. in Cambaliech ciuitate regnj Katay (*W.* Kathag). Anno dominj .m°. cccvj°. (*W.* 1306) in dominica quinquagesime. mensis februarii.

[1] The italic type, which makes these words look like an actual quotation from the Chronicle, is only found in the second edition of the *Annales*, and was not used by Wadding himself.

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to show that Wadding did not copy this Chigi text exactly, without reference to *P.*, and it is just this passage that Golubovich was misled into saying was "literally identical in Wadding". It is perhaps now impossible to find out the reason why these last sentences of the letter were reported in indirect speech, instead of being copied, in full or with omissions, from the original, and why each transcriber in turn has introduced them with a different phrase; and it is useless to guess.

The text proceeds :—[1]

ET cum predicte littere in italiam apportate corda omnium fratrum, & fidelium laycorum ad zelum fidei cum letitia excitarent, Seruus dei fidelis de Tolentino cum sotijs rediens a tartaria cum predictis litteris ad curiam domini pape Clementis, ultra montes accessit. Et dominus frater Johannes de murro episcopus cardinalis de ordine minorum, cum gaudio fratrem Tomam recipiens ad dominum papam Clementem, & ad cardinales introduxit Et quia ipse frater Tomas feruebat spiritu dei, & facundissimus erat sermone scripture omnia ista noua dissertissime explicauit, rogans ut fauorem, & auxilium in tam magno opere comodaret Et dominus papa clemens & omnes cardinales repleti letitia celebrantes consistorium generali ministro commiserunt ut vij. bonos fratres minores eligeret qui episcopi consecrarentur. Et cum priuilegiis suis copiosi ad indiam pertransirent. Et fratrem iohannem presulatu dignissimum archiepiscopum consecrarent, & ita factum est

NAm electi sunt vij. Scilicet frater Guilielmus Gallicus. frater Nicolaus de Apulea qui fuerat minister in prouincia sancti francisci. Frater Andreas de Guidonis de perusio lector frater peregrinus de castello, & alij tres fratres episcopi per sanctam obedientiam domini pape & generalis ministri ad tartariam missi fuerunt. Et per dei gratiam peruenientes ipsum fratrem Johannem archiepiscopum

[1] Fol. 99 r°. Compare *Journal* R.A.S., July, 1914, pp. 557–9; *Ann. Min.*, vol. iii, p. 60.

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consecrauerunt Que autem in priuilegijs continebantur infra describuntur.

. . . . . .

[*margin*: Bulla [1] dominus papa clemens ad dominum fratrem Johannem archiepiscopum

CLemens episcopus seruus seruorum dei dilecto filio fratri Johanni de monte coruino ordinis fratrum minorum, per nos in Archiepiscopum cambaliensem electo salutem & apostolicam benedictionem. Prouidentiam summi, & eterni regis regnantis in celum qui pro dispositione temporum celestia pariter, & terrena recti iudicij censura disponit in suppreme speculationis prehemenentia presidentes, & si multis, & arduis que in apostolicum romane sedis aluum undique confluunt quasi torrens pregrauemur negotijs, curis excitemur innumeris, & agitationibus pluribus distrahamur, Jd tantum inter cetera desideria nostra feruenter appetimus, uotis feruentius affectamus in missarum sollemnijs incessanter a domino petimus. & ad hoc operose. sollicitudinis studium diligentius impertimur, vt vbicumque terrarum fides catolica vigeat. cunctis mortalibus xristi sanguine pretioso redemptis, celestis, gratie splendor inradiet & salus proueniat animarum, quatenus & ipsi astuti nequitia primeui seductoris elisa, qui semper circuit, ut offendat, Eterne beatitudinis gloriam, quam humanus non sufficit capere intellectus quamque diligentibus se celorum dominus pollicetur in suauitatis dulcedine perfruantur. Cuius quippe salutis affectande comoditas ex operibus fidei orthodose producitur. cum sacre scripture tesstatur eulogium nullus deo qui absque fidei interuentione non colitur, placere ualeat sine fide. hec est igitur sacra fides que hostem de arce mentis expellit. que corda purificat. (& sue lucis radio tenebras infidelitatis expurgat. hec est uirtutum omnium fundamentum. hec est stella matutina solem iustitie, inteligentie que preueniens. per eam dies oritur gratie, quam dies glorie subsequetur. Sane nuper ad notitiam dicte sedis fide digna relatione

[1] Compare *Journal* R.A.S., July, 1914, pp. 559, 560, 564, 588, note.

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perducta est quod tu olim zelo ortodoxe fidei caritatis accensus de mandato sedis apostolice eiusdem ex premisso consensu, ac ordinis tui generalis ministri licentia speciali, ut lucrifaceres animas infidelium deo. Ad ipsos [1] infidelium partium orientalium te personaliter trastulisti. & in terris domini Tartarorum quam plures infidelium per lauacrum sacri baptismatis ad ipsam fidem xristi fauente gratia tibi spiritus sancti reduxisti fideliter, & actente. Et deinde ad superiores partes quam [?] principis magni regis tartarorum perueniens post multas, & uarias persecutiones, & insidias, & iniurias tibi per nestorianos heretecos inrogatas, & non nullas falsitates impositas, ac tribulationum concussiones iniurias [?], tu tanquam fidelis xristi atheleta, & fortissimus propugnator faciente. illo fidem cuius imperio reges regnant, & principes dominantur in magnam dicti magni regis gratiam ob amorem dicte fidei ueritatem, comperta merito deuenisti. Sicque dextra domini te cum miram agente & dirigente salubriter actus tuos quandam ecclesiam in honorem dei, & catholice fidei in ciuitate Cabalech [fol. 99 v°] vbi magna, & honorabili [2] regni dicti magni regis de uoluntate eiusdem regis construi procurasti Jn qua erecto campanili, & campanis positis in eadem ystorie noui, & ueteris testamenti ad doctrinam rudium depingi faciens, conuentum puerorum quos in eorum pueritia de elimosinis a fidelibus tibi irrogatis emeras, & per baptismatis sacramentum fidelibus agregaueras vnitati, quosque in lingua latina, & literarum latinarum doctrina per te sufficienter edoctos in ecclesiastico officio iuxta romane ecclesie instutita competenter & laudabiliter instruxisti, & promouente domino salubriter ordinasti Qui quidem fratres siue clerici diuina eis subministrante gratia in obseruantia mandatorum dei feruenter intenti. laudes deo referunt in ipsa ecclesia. hymnumque de canticis syon in terra aliena resonant, & faciunt resonare Ac tamen tu, quam ipsa nonnulla in illis partibus exercetis opera pietatis,

[1] *P.* ipsas Note that both MSS. read partium
[2] Perhaps read honorabilis *sedes*

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& caritatis que fidem augent. & magnum promouent fructum, & comodum animarum. Nos uero quos zelus salutis animarum excitat, ad hoc tam pium sicut inceptum negotium salubriter promouendum ad premissa tibi[?] sancte sedis oppiniones merita circumspectionis apostolic- aciem extendentes, & considerantes actentius quod in predictis partibus ponendus est angelus qui amictus sit nube scripture uidelicet prophetarum irim gestet in capite .s. sancti spiritus donum habens per misticum intellectum, omnes conuincat adversarios ueritatis, & confutet. librum que apertum tenens in manibus, tanquam scriba doctus in regno celorum commissos sibi populos erudiat ad salutem. Et quod per hec alia tui ministerij pia studia que inspirante deo circa incrementa fidei non sine magnis laboribus, & detractionibus, ac turbarum concussionibus fideliter, & assidue operaris in eisdem partibus ammotis ex toto perniciosis erroribus in ipsis partibus producentur hereses. scismata euellantur. & magna qui ymo permaxima dicto magno regi, & regno eius bona prouenient, & plurima optata succedent, vt gloria ipsius fidei ortodoxe sicut speramus tanta ibidem potentiori virtute uallabitur, quanto predictus rex ad laudem diuini nominis & regnum eius predictum feliciori decorabitur ueritate. Te ordinem fratrum minorum profexum quem de litterarum scientia, religionis obseruantia, vite munditia, honestate morum, & aliarum uirtutum donis testimonia fide digna commendant Jn predicta ciuitate cambaliensi de fratrum nostrorum consilio, & apostolice potestatis plenitudine Archiepiscopum ordinamus & preficimus in pastorem. Curam, & solicitudinem animarum existentium in partibus supradictis, ac omnibus alijs que subduntur dominio tartarorum tibi plenariam commictentes. Tibique exercendi omnia que ad iura archiepiscopalia spectare noscuntur, prout permictunt canonice sanciones. Nec non tuis successoribus, Archiepiscopis Caballensibus qui erunt pro tempore vtendi omnibus, & singulis gratijs, & concessi[oni]bus quas pridem per litteras nostras de ordine fratrum minorum tuo in terras saracenorum, paganorum, ac aliorum infidelium

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proficiscentibus autoritate apostolica duximus indulgendas. Eandem autoritatem concedentes tibi plenam, & liberam potestatem in illo qui dat gratias, & largitur premia. Confidentes per tue prouidentie studium, & prouidentie operationis exercitium quod commissus tibi populus suorum errorum tenebras profugabit. & ad xristum dominum viuum, & saluatorem suum sua corda perfecte conuertet. & conuersus preseruabitur a noxijs, & optate prosperitatis spiritualiter, & temporaliter perficiet incrementis. Suscipe igitur incrementer (*sic*) iugum domini. & suaui eius honeri colla submicte. ac sic tue sollicitudini commissam curam predictam exequi studeas diligenter, ut per hec eterne felicitatis premia cum electis accipere merearis, datum &c. Alia Bulla

[*Margin:* Aliud priuilegium ad fratrem Johannem

CLemens episcopus seruus seruorum dei. dilecto filio. Fratri Johanni &cetera. Volentes itaque personam tuam prosequi prerogatiua fauoris, & gratie spiritualis, tibi principaliter autoritate concedimus, vt quiuis ex fratribus dicti ordinis per quem per nos autoritate apostolica episcopos ordinatos, & pro maiori animarum salute in adiutorium huius tibi commisse sollicitudinis per nos specialiter deputatos ad te principaliter [?] mictimus asscitis sibi duobus uel tribus alijs ex dictis episcopis, uel eorum successoribus tibi consecrationis munus uice nostra ualeat impertiri: Quicumque post huius consecrationis munus persone tue impensum pallium in signum videlicet pontificalis officii pro te a nobis, & in ea que decuit instantia posculatus, & de corpore B. petri sumtum quod tibi per eosdem episcopos destinamus Jniungentes eis tenore presentium ut id fideliter faciant, & assignare procurent sub forma quam sub bulla nostra mictimus interclusam. Recepturi a te postmodum nostro, & ecclesie romane nomine sub forma quam sub eadem bulla dirigimus fidelitatis debite iuramentum. Formam autem iuramenti quod te prestare contigerit de uerbo ad uerbum nobis per tuas litteras tuo sigillo ligatas idem episcopus qui tibi munus consecrationis impertietur huius, & pallium assignabit prefatum per proprium

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numptium mictere non preponat. Tu uero predicto pallio illis diebus utaris, quibus tibi de iure uti licebit. Vt igitur signum non discrepet a signato, set quod geris exterius serues in mente discretionem tuam monemus, & ortamur actente, per apostolica tibi scripta mandantes quatenus humilitatem, & iustitiam dante domino, qui dat premia, & munera elargitur obseruare studeas. & suum seruent & promoueant seruitorem. Datum &c.[1] Alia Bulla [*Margin*: aliud priuilegium quod frater Johannes possit episcopos consecrare.

CLemens episcopus. seruus seruorum dei. Dilecto filio fratri Johanni &c Quod si plures quam dictos sex episcopos ad tam pium, & salubre opus necessarios fore cognoueris, Tu alias personas uita scientia, & etate ydoneas ubi, & quando expedierit uice nostra, & nomine ipsos episcopos consecres, ordines, & preficias in pastores eis curam animarum, & solicitudinem commissi sibi populi plenarie commictendo. ac ipsis preter eos qui de mandato nostro iam consecrati sunt consecrationis munus impendas. ascitis duobus uel tribus episcopis iuxta consuetum, & necessarium in hac parte. Ac omnia alia, & singula facias que in his fuerint oportuna. Sic te in omnibus habiturus, quod post diem retributionis premium, nostram, & dicte sedis gratiam vberius consequi merearis. Datum &cetera

[1] These two Bulls are alluded to in what is, perhaps, the earliest printed reference to John. In a list of cases where the pall has been sent "to the ends of the earth", John Magnus writes in his history of the Church of Upsal: CLEMENS V. anno 1305. fecit fratrem Ioannem de monte Caluino, ordinis Minorum, existentem in dominio Tartarorum, Archiepiscopum Cambalnensem, fecitque consecrari in curia IX. fratres eiusdem ordinis in Episcopos, quos misit ad partes illas Suffraganeos, & in auxilium ipsius Archiepiscopi, missum est sibi palleum de curia, ordinatúmque quod esset propter loci distantiam pro successoribus. *Metropolis Ecclesiae Upsalen.* 1557, p. 45. The date is 23 July, 1307. It must be left to experts to decide whether this text of these and the following Bulls, which have hitherto been thought to have been lost, is of any value. The style seems to be unusually weak in grammar; and the supposed author of the Chronicle was specially noted for his forgery of such documents. See p. 107, note 1 below, and Allacci's *Animadversio* there quoted, pp. 281, 288, 289.

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ALiud priuilegium est quod dicti episcopi, si frater Johannes obisset possint alium eligere, & consecrare autoritate domini pape. Et sic de omnibus alijs archiepiscopis uenturis, & successuris in archiepiscopatu cambaliensi fiat, ne ecclesia pastore careat. quia propter longitudinem itineris, & periculosa discrimina ad romanam curiam cito recurri non poterit [fol. 103 r°] . . . . . .
Alia uero testimonialis epistola serui dei fratris Andree episcopi inferius scripta annotatur de statu fidei, & conditionibus orientis.

FRater[1] Andreas de perusio de ordine fratrum minorum. divina permissione uocatus episcopus. Reuerendo patri. fratri. N. guardiano perusini episcopatus,[2] salutem, & pacem in domino sempiternam. & infra. Nam propter immensa terrarum, & marium discrimina[3] inter me, & vos interiecta vix sperare possum quod littere ad uos per me trasmisse ad manus uestras ualeant peruenire. Noueritis me itaque cum bone memorie fratre peregrino coepiscopo, & mee peregrinationis indiuiduo comite post multos labores langores, & inedias variaque incomoda atque pericula in terra pariter, & in mari vbi fuimus rebus omnibus, & etiam tunicis, & abitibus spoliati. Demum deo iuuante ad cambalensem ciuitatem que sedes est imperij magni canis anno dominice incarnationis M°. ccc xviij[4] ut credo peruenisse. vbi secundum mandatum a sede apostolica nobis datum archiepiscopo consecrato moram ibi per quinquennium ferme contraximus Jnfra quod spatium temporis procurauimus alapha ab imperatore magnifico pro uictu, & vestitu octo personarum. Est autem Alepha impense quas imper[at]or tribuit numptijs magnatorum oratoribus bella-

[1] Compare *Journal* R.A.S., July, 1914, pp. 564–7; *Ann. Min.*, tom. iii, pp. 335, 6. Another, perhaps the earliest, copy of this letter exists at Assisi (a 14th century MS., No. 341 in the library of the Convent of S. Francis, fol. 136), but I have not yet been able to consult it.—Golubovich, *op. cit.*, tome ii, pp. 103, 115.

[2] *P. W.* conuentus

[3] *P. W.* mariumque distantiam

[4] *W.* 1308.

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toribus, & diuersarum [1] artium artificibus, & ioculatoribus pauperibus, & diuersarum conditionum personis. Que impense plurium latinorum regum introitus, expensasque trascendunt. De diuitijs, magnificentia, & gloria huius magni imperatoris, de uastitate imperij multitudine populorum, & numerositate ciuitatum, & magnitudine earundem. & de ordinatione imperij in quo nemo aduersus alium ausus est leuare gladium transeo. quia longum foret scribere. & audientibus incredibilia uiderentur Nam ego ipse qui presens sum, talia audio que [2] uix credere possum. Est quedam magna ciuitas iuxta mare oceanum que uocatur in lingua persica Cayton [3] in qua vna diues domina Armena ecclesiam erexit pulcram satis, & grandem quam quidem de ipsius uoluntate per Archiepiscopum catredalem effectam [4] cum competentibus dotibus fratri Gerardo episcopo, & fratribus nostris qui cum eo erant donauit in vita, & in morte reliquit qui primus eandem catredam suscepit. Mortuo autem dicto episcopo, inibique sepulto uoluit archiepiscopus in eadem ecclesia me facere successorem. Set ego huiusmodi locationi, & successioni non assentiui vnde illam [5] contulit fratri peregrino [6] qui illuc habita oportunitate se contulit. Et postquam paucis annis rexit eandem anno domini 1322 [?] [7] in crastino [8] apostolorum petri, & pauli diem clausit extremum, ante cuius decessum per quatuor fere annos ego quoniam in cabalech non eram consolatus ex aliquibus causis procuraui quod dictum alapha elimosina imperialis mihi daretur in prefata ciuitate Zayton,[9] que distat a cambalech itinere fere mensium trium.[10] Et cum octo equitaturis ab imperatore mihi concessis ad eandem ciuitatem cum magno honore perrexi, & applicui adhuc fratre peregrino episcopo uiuente. Et in

[1] *P.* diuersorum
[2] *P.* quod
[3] *P.* Çayton
[4] *W.* in Cathedralem erectam,
[5] *P. W.* me non prebente assensum ipsam —*W. omitting* ego *above.*
[6] *P. W. add* Episcopo memorato
[7] *P.* mº. ccc. xxijº. *W.* 1322.
[8] *P. W. add* octaue
[9] *P.* Çayton. *W.* Caytonis
[10] *P. W.* mensium (*W.* hebdomadarum) fere trium ut dixi sollicite procurauj.

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quodam nemore proximo ciuitati ad quartam partem vnius miliaris ecclesiam conuenientem, & pulcram edificari feci cum omnibus officinis sufficientibus pro xx fratribus, & cum quatuor cameris quarum quelibet esset pro quocunque prelato sufficiens. Jn quo quidem loco moram traho continuo, & viuo de elimosina regia memorata, que iuxta mercatorum Januensium extimationem ascendere potest annuatim ad valorem c. florenorum aureorum, uel circa. Et de hac elimosina magnam partem in edificatione loci predicti expendi cui similem in hermitorijs nostre prouincie nullum scio quo ad pulcritudinem, & omnem comoditatem. Denique non longo elasso tempore post obitum fratris peregrini recepi decretum archiepiscopi de locatione nostra [1] in memorata ecclesia catredali, cui [2] assensum prebui causa memorata [3] rationabili suadente Et nunc in loco uel ecclesia ciuitatis, & in hermitorio moram traho iuxta mee arbitrium [4] uoluntatis. Et sum sanus [5] corpore. & quantum longeuitas uite patitur vigorosus, & agilis, nil que preter canitiem habens de [6] defectibus naturalibus, & proprietatibus senectutis. San[e] in isto uasto imperio sunt gentes de omni natione que sub celo est & de omni secta. & conceditur omnibus, & singulis uiuere secundum sectam suam. Est enim hec oppinio apud eos, seu potius error quod vnus quisque in sua secta saluetur. Et nos predicare possumus libere, & secure. Set de iudeis, & saracenis nemo conuertitur. De ydolatris baptizantur quam plurimi. Set baptizati [7] non recte incedunt per viam xristianitatis sicut deceret. Quatuor nostri fratres martirizati fuerunt in india a saracenis, quorum vnus bis in ignem missus inlesus euasit. Et tamen ad tam stupendum miraculum nullus est a sua perfidia permutatus.[8] Omnes

[1] *P.* mea [2] *P. W. add* locationi [3] *P. W. omit* memorata
[4] *P. W.* facio iuxta mee libitum [5] *P. W.* sano
[6] *W.* patitur, aliquibus adhuc annis in hac messe laborare potero, licet canitiem habeam ex *P. agrees exactly with the text, except that it has* nichil quidem *for* nil que
[7] *W.* multi ex baptizatis
[8] *P. W. add* hec omnia—fratribus uniuersis.—58 *words, in which W. has* discesserunt *for P.* decesserunt, *but otherwise agrees exactly with P.*

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episcopi suffraganei facti per dominum papam Clementem cabaliensis sedis migrauerunt in pace ad dominum. Ego solus remansi. frater Nicolaus de Banthra olim minister prouincie sancti Francisci,[1] & frater Andratius [2] de Asisio, & vnus alius episcopus frater mortui fuerunt in ingressu indie inferioris, in terra quadam calidissima vbi plures alij fratres nostri mortui fuerunt, & sepulti. Valeat in domino uestra paternitas nunc & semper. Datum in Zayton [3] anno domini M° ccc xxvj in mense Januarij.

A careful examination of the three texts (*P.* *W.* and *Chigi*) of this letter shows that *P.* contains 796 words. Of these about 77·5 per cent are the same in all three texts; *P.* and *W.* agree in 13·5 per cent; *P.* and *Chigi* in 5·5 per cent; *W.* and *Chigi* agree in about 1 per cent, and in omitting 6 words which *P.* includes; and in 7 words all three texts differ. The nine cases where *W.* follows *Chigi* against *P.* are *que* for *quoꝺ*, *nostra* for *mea*, *diuersarum* for *diuersorum* (a mere slip), *Cayton* for *Çayton*, *secta* (thrice) for *septa*, 1322 for *m ccc xxij*, and *quatuor* for *.iiij.* Of the 6 words in *P.* which *W.* and *Chigi* omit, 4 are in rubrics or notes outside the real text and 2 are apparently a mere blunder (*in Çaito*). *Chigi* omits 79 words, or nearly a tenth part of *P.*, and of these Wadding has inserted 77 exactly as in *P.* and 2 with slight differences (subsequitur, sequitur; decesserunt, discesserunt). It will then be obvious that the text here printed from the MS. in the Chigi Library is not the one which Wadding used; and that he did use either *P.* (the Paris MS. Latin 5006) or some very similar text. Of the 796 words of *P.* Wadding reproduces 730 exactly, omits 15, differs in 51, the differences being often quite trivial and including differences of order, and adds 7 words. An analysis of the first letter of John of Monte Corvino shows an even greater degree of agreement between *P.* and Wadding. On the other hand, it will be noticed that

[1] *P.* *W.* *omit* olim . . . Francisci
[2] *P.* *W.* Andrutius
[3] *P.* Data in Çaito in Çayton *W.* Data in Cayton

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while the cases in which *P.* differs from *Chigi* are about three times as many as those in which *P.* differs from Wadding, yet Chigi has hardly ever changed the sense of *P.* in any serious degree, though Wadding has done so frequently.[1]

Besides the conclusive evidence of the text itself that the Chigi MS. was not used by Wadding, there is some external evidence to the same effect. Amongst Golubovich's conclusions from the data before him we read (p. 139) "that the Chigi codex is, *paleographically*, an evident forgery of Ceccarelli, and so clever a one as to have deceived the learned Wadding, who calls it *vetustissimus codex ms.*" The first part of this statement I am not prepared to dispute, though it rests, *as far as I yet know*, on nothing better than these words of Edouard d'Alençon in the Introduction to his edition of T. de Celano's *Life of St. Francis*: "I have used the Codex Chisianus I, vii, 262, which seems to be in the hand of the aforesaid forger (Ceccarelli), for you would say that Leo Allacci had this MS. before him when he described another fictitious work of the same man." [2] The Chigi MS. I, vii, 262, is said to be entitled *Chronica S. Johannis a Capistrano*, and this, if true, gives great interest to the references to Leo

[1] Wadding's changes include *iam ante duos annos* for *iam est annus duodecimus*; *magnus explorator* for *explorator magus*; *sine socio* for *sine confessione*; CL *pueros* for *xl. pueros*; *Latinis, & Græcis ritu* for *latinis & ritu*; *regiis vestibus* for *sacris vestibus*; *Gothorum* or *Kathan* for *Cothay*; *scribo* for *teneo*; *eximiæ* for *exigit*; 1308 for *mº.ccc. xviij*; *iaculatoribus* for *ioculatoribus*; *hebdomadarum* for *mensium*; 22. for *.xx.*; *aliquibus adhuc annis &c.* for *vigorosus & agilis &c.* (p. 104, note 6). On the other hand, the most important differences between *Chigi* and *P.*, apart from large omissions, are perhaps XXX for XX; *millesimo ijc. v.* for *mº. ccc. vº*; *vbi picture* for *vj picturas*; *nutritis & baptizatis* for *quos emj & battizauj*; *iij milia* for *plura milia*; *petrutius* for *Petrus*—mostly occurring in the space of a few lines, p. 91 above.

[2] adhibens Codicem Chisianum (Biblioteca Chigi), I, vii, 262, qui videtur autographum praedicti falsarii, nam hoc manuscriptum ante oculos habuisse diceres Leonem Allatium, quum aliud fictitium opus eiusdem describeret. ED. ALENCONIENSIS *S. Francisci Assisiensis Vita*, Rome, 1906, Proleg. p. lxxvi. I owe this reference and the following to Golubovich. Alfonso Ceccarelli (1532–83) seems to have been a prolific forger, who was ultimately executed for his pains.

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Allacci, who in the seventeenth century devoted himself to exposing Ceccarelli's forgeries. Of these he gives a very long list, including five purporting to be by John of Capistrano, as follows: *Ioannis de Capistrano* Chronica, De Originibus Vrbium, Ciuitatum, & Oppidorum totius Mundi. ait Ciccarellus in ea laudari *Chronicam Dominorum de Brunforte*, & alios. . . . *E*[*iusdem*]. De vitis Sanctorum, & rebus Ecclesiæ. *E*. De Episcopatibus, & Archiepiscopatibus. . . . *E*. De origine, & religione militantium pro fide Iesu Christi, atque Ecclesiæ Romanæ defensione. *E*. De vera Donatione Constantini Imperatoris. "When," adds Allacci, "I spoke about these works of John of Capistrano to Luke Wadding, he burst into laughter at the mere hearing of their names." The next day Wadding wrote a letter, which Allacci prints, in which he says: "Your conversation yesterday and your note to-day about the works ascribed to John of Capistrano fill me with wonder." After describing John's legal training and writings, he proceeds: "The few little theological tracts which he mingled [with the legal], and the sermons which he preached, savour less of the theologian than of the lawyer. His manuscripts, brought from Capistrano to the City, I have had in my keeping, and have been at great pains to find out the titles, which I add to this note. . . . Those added by Ceccarelli are spurious. (He here repeats the five titles given above.) You will find nothing of this kind ever written by Capistranius, *nothing historical did he ever plan; no trace of it, certainly, occurs in the rest of his works.* . . . 5 Oct., 1641."[1]

[1] Cum de hisce Ioannis Capistranii monumentis sermonem haberem cum doctissimo . . . Luca Waddingo, sola eorum auditione in risum effusus est; . . . *Leoni Allatio . . . F. Lucas Waddingus. Hesternus tuus sermo, & hodierna pagella de speciosis Ioanni Capistranio adscriptis Operibus vehementer admirari faciunt, . . . Pancula, quæ intermiscet Theosophiæ argumenta, & quos e rostris dixit sermones, stylo, & methodo non tam Theologum sapiunt, quam Iurisconsultum. Autographa Capistrano, Aprutiorum oppido, in Vrbem aduecta penes me habui, & diligenter excussi ipsos comperi titulos, quos literulis istis subiungo, . . . spurii sunt, & degeneres, quos addit Ciccerellus,* De Originibus Vrbium . . . Imperatoris. *Nihil unquam in hoc genere a Capistranio scriptum, nihil usquam comperies de re historica meditatum: nullum prorsus in reliquis operibus occurrit vestigium.*

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If our MS. (I, vii, 262) is the same as the *De Originibus Urbium*, we have here the proof that both Allacci and Wadding himself (*who does not seem to have seen the book*) condemned it as a Ceccarellian forgery; but if, on the other hand, it is not the same,[1] Wadding assures us that he knows of no such historical work among the rest of John's writings. The argument is not conclusive; but it seems to make it reasonably certain that Wadding, who had published the three letters from China from some Chronicle, which he attributed to Odoric, in 1636, and had made a special study of the works of John of Capistrano, had never heard of any *Chronica S. Johannis a Capistrano* until 4 October, 1641.

Turning again to the manuscripts themselves, a careful examination of the passages printed in 1914 from *P.* and now from the Chigi MS., other than the letters themselves, will give even better reason for thinking that Wadding did not use *Chigi* and may well have used *P.* To take the passages in order as printed in 1914, the introduction (p. 546) to the first letter is very much altered in *Chigi* and is omitted by Wadding, who substitutes for it words which have a bearing on the question of the last paragraphs of John's second letter. "Certainly in this very year [1305] he wrote two letters, the first in January. . . . The second he wrote near the end of the year to the brothers living in Persia and India. Both of them I have copied from a very ancient manuscript of the Blessed Odoric of Friuli."[2] The next passage (pp. 551–2, Has litteras . . . archiepiscopo) also is altered, but not seriously,

. . . 3. *Non. Octob.* 1641. Leonis Allatii *Animaduersio in Libros Alphonsi Ciccarelli, Rome*, 1642, pp. 318, 19, 321, 2. Cf. Wadding, *Scriptores Ord. Min.*, 1650 (ed. 1806), pp. 134, 5. The 45 works of Ioannes Capistranus (1385–1456) here enumerated contain nothing historical. At the end of the list Wadding notes that the five works named above were attributed to Capistrano by Ceccarelli. Sed haec spuria sunt, & conficta ab insigni mendaciorum architecto, qui sub Gregorio XIII. tot imposturas . . . pœna luit capitali.

[1] The words ait in ea laudari *Chronicam* . . . *Brunforte*, afford an easy test of the identity of the two Chronicles for anyone who has access to the Chigi library.

[2] *Ann. Min.*, iii, p. 44.

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in *Chigi*, and omitted by Wadding. Coming to pp. 557–9 (Frater vero . . . interiorem et in yndiam) Wadding will be found to reproduce this long passage very exactly, adding 9 unimportant words, changing a few (of which *praecipuis* for *propinquis* and *Petrus* for *Peregrinus* are the most important) and omitting two or three ; while *Chigi* shortens and changes the whole. The Pope's Bull (pp. 559–61) Wadding gives from *Dilecto* to *ammiranda opera eius* even more exactly, including the notes *infra sequitur*, and *&c. quae sequuntur*, while *Chigi* professes to give the complete text. Wadding then gives the letter *Magno Regi omnium Tartarorum . . . Splendor patris . . .* ending *deest finis*, which corresponds to *&c.* in *P.* (not printed in 1914) ; omits the paragraph *Illi uero septem*, but gives the story *de fratribus minoribus uisitantibus captiuos* in the right place according to *P.*

Whether the writer of the Chigi MS. used *P.* is not easy to decide from the few pages of either MS. which I have seen ; but occasional coincidences of phrases or spelling (see p. 98, note 1, and the clumsy sentence *Et hic frater . . . paramenta* on p. 89 above and 1914, p. 551) incline one to think that Golubovich is right in saying that *P.* supplied those parts of the Chigi MS. which are common to both.

For our present purpose the most interesting addition to the documents hitherto known is the following letter from Bishop Peregrine of Zaitun. It is, of course, easy to suspect it of being spurious. The style is awkward and unnatural, though not so ungrammatical as that of the papal Bulls already given ; and the fact that its existence seems never to have been suspected by any of the historians of the Minor Friars until this century is a very serious objection to its being genuine. If it is proved that the compiler derived all the rest of his Cathay material from *P.* the case against this letter will be even stronger. A considerable part of the subject-matter might have been invented with no great ingenuity from the letters of John and Andrew ; the passage about King George, who had been murdered twenty years before, seeming specially

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clumsy. But it is fair to remember that it was John's letters about King George which had caused Bishop Peregrine to be sent to Cathay; he calls him "*that* King George", and seems hastening to assure his friends that John's wonderful story was really true. The passages about the Armenians and the Alani could not be derived directly from any document known to me, but they are not either impossible or improbable, and the general truth of what is said about the Alani is confirmed by an extant letter from their own Chiefs.[1] The date, which seems to have surprised Golubovich, is perfectly possible and natural, and the fact that no attempt is made to conceal its glaring inconsistency with the same date (1318) wrongly written in Andrew's letter a few lines lower down on the same page is in its favour. Of the persons named in the letter John, and Andrew, and King George would lie ready to the forger's hand; Peter of Florence would need far wider reading for his discovery, but he is a real person and might easily have been in Khanbalig in 1317/18; Johannes Grimaldi, Emanuel de Monticulo, and Ventura de Sarezana do not seem to be in Wadding's Index, list of martyrs, etc., nor in the *Bullarium Franciscanum*, though that does not prove that their names are invented. It is clear that many besides the few whose names we know reached China during the first half of the fourteenth century.

The letter begins on fol. 102 v°:—

Epistola

REuerendis in xristo patribus fratri .N. vicario generalis ministri, Ceterisque fratribus vicarie orientis frater peregrinus paupertatis episcopus in mundo alio constitutus Reuerentiam, & salutem, cum desiderio noua de mundo fidelium audiendi. Et si sicut prodigus filius fecissemus ego, & sotij mei fugientes ad terram longinquam sicut ceteri debuisset saltem pia mater religio recordari de filijs quos ad inauditum exilium destinauit. materna enim

[1] Cf. this *Journal*, Jan. 1917, pp. 13, 31.

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viscera contra filium rigorem iustitie non admictunt. & infra. Episcopus sum licet indignus. & infra. Et pater frater Andreas de perusio episcopus, & ego peruenimus Gabalech. Dico igitur primo de Archiepiscopo fratre Johanne. Vita eius exterior bona, & dura, & aspera. De illo uero rege Georgio certum est quod ipsum plene, & laudabiliter conuertit ad ueram fidem, cum ante cum nestorianis misceretur. Et ipse rex vna die de suo populo plura milia conuertit. Et si vixisset uere totum populum eius, & regnum humiliassemus ad xristum. Et etiam magna canis mutatio facta fecisset. Ante uero quam frater Johannes archiepiscopus predictus ueniret ad imperium magni canis nullus xristianus cuiuscumque conditionis, & nationis esset preualere poterat erigere quantumcumque paruum oratorium, & signum xristi propter potentiam nestorianorum prohibentium. Et sic uel eos sequi cogebantur in ritu scismatico, & erroneo, uel quasi viam infidelium capere. postquam uero uenit frater Johannes deo ipsum iuuante malo uelle nestorianorum ecclesias plures erexit. Et alie nationes xristianorum qui odiunt nestorianos scismaticos, ipsum fratrem Johannem secute sunt. & precipue armeni qui sibi nunc notabilem construunt ecclesiam. & dare illi intendunt. vnde & ipse continue est apud eos, relicta ecclesia latinorum alijs fratribus. Item Quidam xristiani boni qui dicuntur alani pro xx milibus a rege maximo stipendia accipientes, ipsi, & familie eorum ad fratrem Johannem recurrunt. Et ipse eos confortat, & predicat. Nec uidemus. .& istis predicare possumus, & sacramenta ecclesie ministrare. Circa infideles uero libere possumus predicare, et in moscheta saracenorum pluries predicauimus ut conuertantur. Ydolatris uero similiter in magnis ciuitatibus eorum per duos medios interpetres. Multi congregantur, & ualde mirantur. & diligenter inquirunt de istis. Et quia nunc inceptum est spem bonam habemus uidentes populos intentos ad audiendum, & currendum vbi nos predicamus. Vere credimus quod si linguas eorum haberemus mirabilia dei apparerent. Messis multa valde.

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set operarij pauci, & sine falce. Nam pauci fratres sumus, & senes admodum & inabiles ad discendas linguas Parcat deus illis qui fratres impediunt ne ueniant Vere credo quod inimicus hoc operatur ne inuadamus eius imperium quod sine molestia possidet. In cambaliech sunt archiepiscopi, & frater Andreas de perusio, & frater petrus de florentia episcopi. & eis nil deficit in temporalibus. In spiritualibus uero credo quod nunquam tantum habuerint. Irruit enim & uenit spiritus Sanctus in istos duos episcopos. & in tantum orationibus insistunt, & sanctis meditationibus. Et spiritus dei qui eos visitat, & consolatur, & fouent in tantum quod omnium uidentur esse obliti die ac nocte in sanctis uigilijs domino assistentes. Ego autem cayfensis episcopus factus ibi cum tribus fratribus deuotis pacifice, & tranquille deo uacare possum [fol. 103 r°] Et ipsi serui dei frater Johannes grimaldi, frater emanuel de monticulo, & frater uentura de Sarezana qui in istis partibus qui in istis partibus est frater factus, qui in omni uirtute bene fortificati deus honoratur per eos vtinam tales haberemus centum nobiscum. In ciuitate Cayton bonam habemus ecclesiam cum loco. quam quedam domina Armenie nobis reliquit. & necessaria uite pro nobis & pro alijs si uenerint assignauit. & extra ciuitatem locum pulcrum habemus cum silua vbi cellas facere cupimus, & oratorium. Nulla alia re indigemus, quantum fratribus quos desideramus. Frater Gerardus episcopus mortuus est. & alij fratres non possumus diu uiuere. nec alij uenerunt remanebit ecclesia sine baptismo, & sine habitatoribus. Noua & condiciones istius magni imperij si scriberem non crederentur. quanta sit potentia ipsius, quanti exercitus. latitudo terre. quot redditus, quot expense, quot elimosinas faciunt. Comparauerunt eam nostri latini in hijs, ad omnes alios reges mundi. set excessum non scribo. Ciuitas maxima Cayton vbi sumus super mare est. & distat a maxima Cambalieth itinere fere trium mensium. datum in Zayton iij kal ianuarii anno domini 1.318

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I take this opportunity of making some corrections in the earlier article of July, 1914.

Golubovich speaks of certain notes on the flyleaf of *P.* (B.N. MS. Lat. 5006) which I have been able to verify on rotographs obtained through the kindness of Monsieur H. Omont. They are (1) hunc librum dat frater Eleemosina . . . loco Gualdi . . .; in a fourteenth century hand, not that of the scribe of the Chronicle itself. (2) Chronica historiarum antiquarum manuscrip. usq. ad. an 1334; nam usq ad benedict' PP xii . . . fol 188. b; in a late sixteenth or seventeenth century hand. (3) a note, in the hand of the writer of the Chronicle, about cities which are named after persons: Sicut enim ab Alexandro magno Alexandrie .iiij. nuncupantur. and so forth. Below this is half a page of ancient writing quite illegible, with a sentence in a later hand written over it, beginning Habitus Pisanis; and (4) in a large irregular hand apparently of the first half of the seventeenth century: Cronica pa odoricio. On none of the pages seen by me is there a note that the MS. was finished in 1336, though that date may no doubt be inferred from the closing words of the Chronicle on fol. 188 v°, col. 2, where we read: Hic etiam benedictus. papa. xii^us. preclaras & deuotas constitutiones. super ordines monachorum & fratrum minorum edidit & instituit obseruari & teneri ab eis ad reformationem religiose uite. & meritum uite eterne.

The first of these sentences is of great interest as telling a little of the very early history of the book. Golubovich, who thought it was in the same hand as the Chronicle, concluded that the author and writer was John Eleemosina, an Umbrian who died in 1339, and that he wrote his Chronicle in the convent at Assisi and bequeathed it to the convent of Gualdo. The only John who was the Pope's Almoner (Eleemosynarius) mentioned by Wadding (*An. Min.*, vol. iii, p. 65, A.D. 1307) was a Roman.

It is noticeable that "Cronica pa odoricio" seems to have been written in Wadding's lifetime. It would be interesting to compare the writing with his.

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The constitutions mentioned in the last paragraph of the Chronicle (fol. 188 v°) must be those which were published on 28 November, 1336, and commended to the Minister General in a letter dated 13 May, 1337, and by him to the Provinces of the Order on 21 June, 1337. December, 1336, is thus the earliest possible date for the finishing of the Chronicle. *An. Min.*, vol. iii, pp. 443, 445, 6.

The description of the MS. quoted on p. 534 (July, 1914) seems to have been copied by Sbaralea from Quétif's *Scriptores Ord. Praedicatorum*, vol. i, pp. 549, 50.

p. 535, l. 2. *For* 1635 *read* 1636

p. 547, note. Cathay and China were probably two quite distinct countries in the mind of John of Monte Corvino.

p. 551, l. 13. *For* 171 r° *read* 171 v°

p. 559, l. 12. For χpisto *read* xpisto

p. 566, l. 6. *For* qum *read* quoniam

pp. 568–71. Golubovich points out that a better text of John of Winterthur than that of Eccard is now available, namely, *Johannis Vitodurani Chronicon. Die Chronik des Minoriten Johannes von Winterthur*, edited by Georg von Wyss, in vol xi of *Archiv für Schweizerische Geschichte*, Zürich, 1856. The passage here quoted is on pp. 208–10. Besides differences of spelling the following changes may be noted :—

p. 569, l. 5. von Wyss prints *ejus* but says the MS. has *eorum*

p. 569, l. 25. convolarunt. In . . . epistola, ante

p. 569, l. 32. crediderit ;

p. 570, l. 13. revocare sicut oves

p. 571. gratiam invenit in oculis principis sepedicti, quod eum . . . sentiebat.

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p. 577, note 1. The use of *infra* is quite normal.

p. 581, l. 32. *For* Archbishop.[1] *read* to the Archbishop. *and cancel the footnote.*

p. 586, l. 14. *For* Lord *read* God

p. 587, l. 21. *For* Franchya *read perhaps* France

p. 590, l. 3. *After* son *add* Brother

p. 599. Professor Pelliot has identified Tozan with the Chinese 東 勝 Tung-shêng; and *t*, not *c* or *k*, is no doubt the right initial.

Additional Note

Through the kindness of the Franciscan Fathers at Assisi and Quaracchi I am now able to give the readings of the Assisi MS. 341 (cf. p. 102, n. 1 above) where it differs from *P.* The references are to the *Journal* for July, 1914, where the text of *P.* will be found.

p. 564, l. 10. Vunus uero ex illis deuotis fratribus episcopis de ordine minorum qui missi fuerunt a domino papa Clemente. & a sancta romana ecclesia ad consecrandum in Archiepiscopum. fratrem Johannem supradictum. Tales epistolas modernis temporibus remisit. de se & alijs fratribus. illarum partium. ita dicens. l. 13. Perusio diuina l. 15. ffratrj. NN l. 17. sempiternam. &cetera. & infra pluribus uerbis pretermissis. sequitur. l. 21. peruenire. &cetera. & infra. dicit.

p. 565, l. 1. Alafa. l. 3. *omit* quas imperator l. 14. credere ualeo. unde ad propositum rediens ad ea que me contingunt stilum calamumque conuerto. Est. l. 20. Episcopo. qui primus eandem Cathedram suscepit & fratribus qui cum eo erant nostris donauit in uita. & in morte reliquid.

p. 566, l. 4. xxiij l. 10. mihi ab imperatore concessis l. 12. sepe fato l. 16. *omit* et l. 30. Et sum sanus . . . quantum etatis longeuitas patitur . . . defectibus accidentibus & proprietatibus ll. 35, 36. secta sectam

p. 567, l. 2. *omit* Et nos l. 5. per uiam xpistianitatis incedunt. *omit* de sanctis fratribus. l. 6. In yndia quattuor nostri fratres occisi fuerunt l. 10. sub quadam breuitate perscripta uestre l. 25. *omit* in Zaito

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ERRATA

The following errata are to be made in the article "On the Representation of Tones in Oriental Languages" appearing in the Journal for October, 1920:—p. 455, footnote, l. 2, for "*Anthropus*" read "*Anthropos*". p. 465, wherever the word "Quocʌngu" occurs, correct it to "Quocʌngü".

Proceedings of the Society of Biblical Archæology

Back numbers of the *Proceedings* of the Society of Biblical Archæology are still in great demand, especially Vols. 30–38. Any numbers that members can spare will be most gratefully accepted.

Hakluyt Society's Publications

If any member has copies of Hakluyt Society's publications, Original Series, Nos. 1–25, 27–41, 43–52; also Series II, Vols. 5 and 29, they would be gratefully accepted for the Library.

THE SARROSH K. R. CAMA MEMORIAL PRIZE

The Committee of the K. R. Cama Oriental Institute invite competitive essays for "The Sarrosh K. R. Cama Prize" of the value of Rs. 225 on the following subject: "Life of Zoroaster as based on the Avesta."

The essays should be typewritten or written in a neat, legible hand, and should reach the Honorary Secretaries the K. R. Cama Oriental Institute, Hornby Road, Fort, Bombay, on or before July 15, 1921. Each essay should be designated by a motto instead of the writer's name, and should be accompanied by a sealed cover containing the name of the competitor and his Post Office address. The competition is open to both Zoroastrians and non-Zoroastrians.

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MISCELLANEOUS COMMUNICATIONS

SACRED BOOKS OF THE YEZIDIS

In July, 1916, I wrote an article in this *Journal* (505–26) on the Yezidis and their sacred books. In it I endeavoured to set forth my reasons for believing why the paternity of the recently discovered Yezidi books had to be traced back to some subtle forgers. Nothing that appeared since that date induces me to change my views on the subject; on the contrary, much has come to light to confirm them.

Captain H. P. W. Hutson, R.E., a prominent member of our Mesopotamian expeditionary force, who has had the unique opportunity of studying on the spot the habits and customs of the community of the Yezidis or Devil-worshippers, was fortunate enough to procure a manuscript purporting to contain the sacred books of the Yezidis in their original language. Believing them to be written in Kurdish he began to correspond with all the Orientalists who in his opinion were able to read Kurdish. Eventually the manuscript was sent to me for examination, and I immediately discovered that, apart from some short prayers written in Kurdish, it contained nothing but an Arabic text similar to that of the Yezidi books of which I had previously treated at some length. Appended to the manuscript was a colophon which in view of its importance for the criticism of the Yezidi books I want to publish *in extenso* as it stands :—

سنة ٢٢٠٠ سنة اليونانية سنة ١٨٨٩ سنة المسيحية
سنة ١٣٠٥ سنة الهجرية الداعي بالديانة اليزيدية بكل
وقت امير شيخ اسمعيل بن امير عبدي من ذرية شيخ
آدى وهذا الكتاب تاريخ يازيدية سنة ٢١٦٠ كان ضاع

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وسنة ١٨٨٩ مسيحية جلبه بطرك بطرس على ملة السريان
من الهند ووجده وجلبه ووضعه بدير الزعفران وثاني
بتاريخ سنة ١٩١٤ مسيحية انا المذكور تواجهت مع
مطران الياس الموصلي وقال لي لنا كتاب بدير الزعفران
وحالا سافرت لماردين مع عائلتي وابني وحصلت امر
المحافظين للدرب من والي الموصل ووصلت لماردين
وبعده بكم يوم رحت لدير بعزة واكرام وجلبنا هذا
الكتاب معنا.

"The year 2200 of the Greeks is the year 1889 of the Christian era and 1305 of the Hijra.[1] (From the one) who professes the Yezidi faith at all times, the Amīr Sheikh Ismā'īl, son of the Amīr 'Abdi from the descendants of Sheikh Ādi: this book containing the history of the Yezidis was lost in the year 2160,[2] and in the Christian year 1889 Peter, the Patriarch of the Syrian community, brought it from India, where he had found it, and put it in the monastery of Za'farān (near Mardīn). Then in the Christian year 1914 I, the above-mentioned, had an interview with Bishop Alyās of Mosul, who told me that we had such a book in the monastery of Za'farān. I journeyed immediately to Mardīn with my family and my son, and I obtained from the vali of Mosul the services of some *gendarmes* to protect us on the way. Some days after I reached Mardīn I went to the monastery, and we brought the book with us."

[1] 1305 A.H. corresponds with A.D. 1887 (19 Sept.).
[2] 2160 of the Greeks corresponds with A.D. 1849.

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On this important colophon the following short commentary may be found useful :—

(*a*) The colophon is undoubtedly written by the same hand that wrote the manuscript itself.

(*b*) We have in it the spectacle of a prominent Yezidi sheikh knowing nothing of the fact that his community possesses any sacred books. The existence of such books is revealed to him by a Christian bishop in A.D. 1914.

(*c*) These sacred books were mysteriously lost in A.D. 1849 from the mountain of Sinjār, near Mosul, and by an uncommon stroke of fortune they were in 1889 discovered in India, where they had been taken away, no one knowing how or when.

For those interested in the Yezidis and their sacred books it may not be out of place to remark that after the date of my article in this *Journal*, three important publications have appeared on the subject: A. Dirr, *Einiges über die Jeziden* (*Anthropos*, 1918, 558–74); Isya Joseph, *Devil Worship*, pp. 220 (Boston, 1919); and F. Nau, *Recueil de textes sur les Yézidis* (*Rev. de l'Or. Chrét.*, 1917, pp. 142–200, 225–77).

A. MINGANA.

THE KITAB MA'ANI AS-SI'R, BY IBN QUTAIBA

In 1906 Rhodokanakis published in the *Nöldeke Festschrift* (pp. 385 ff.) a description of the manuscript of the Kitāb aš Ši'r, which he had discovered in the library of the Ayā Sofia Mosque in Constantinople. The manuscript contained only the first part of the work, namely, the first three books. The Constantinople manuscript has fifteen lines to the page, and at the end it is stated that the next book would begin with the chapter on flies ذُبَاب. During a visit to the India Office on the occasion of the Joint Session of the Oriental Societies in London in September, 1919, I was attracted by a manuscript of the same work exhibited in the reading-room

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of the library of the India Office. With their usual liberality, the authorities of the India Office have permitted me to study this manuscript at my home, and I was pleased to discover that this manuscript actually appears to be the continuation of the Constantinople one, as it begins with the explanation of verses in Ancient Arabic poetry mentioning flies. The India Office manuscript also has fifteen lines to the page to folio 142 inclusive; folio 143, which is the beginning of a new Kurrāsa, has seventeen lines to the page, which is maintained to the end of the volume.

Unfortunately, for the sake of concealing the fact that the manuscript does not contain the complete work, a previous owner has torn away several leaves marking the end and beginning of fresh books. Through this vandalism the title-page is missing, which would tell us that the manuscript begins with the fourth book. After folio 39 at least one leaf is torn away. Folio 86*a* contains the colophon of the fourth book, and as the latter only occupied two lines the copyist has used the remainder of the page for the title of the fifth book. Further leaves are torn away after folios 108 and 111. One leaf or more is missing after folio 122, where vol. v ends. This leaf contained the title-page of vol. vi, which comprises the book on war, as is evident from the colophon folio 224*b*, and also from the contents of this section of the work. On folio 133 the Kurrāsas are numbered for the first time; it is folio 15 which begins here, showing that so far eight leaves are missing. From folio 143 each page has seventeen lines, but the handwriting is the same throughout the volume, and from folio 203 a different paper of a pink tint is used. The sixth volume ends on folio 224*b*, but there is an addition which is stated to have been found in the handwriting of Ibn Qutaiba on the back of the book on war; this addition ends folio 225*a*. The next page is blank, and the title on folio 226 tells us that this is the beginning of the seventh volume, which is the last of the whole work. The text runs on without interruption to folio 272, where the manuscript

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ends, except that the fold beginning folio 123 has only eight leaves, but as no gap is apparent, the scribe must have used in mistake a smaller fold than usual.

Each book is divided into smaller chapters, which, according to their subjects, vary considerably in extent. The fourth book contains the explanations of verses on various animals, the fifth book on hatred, hostility, imprisonment, etc., the sixth book on war and implements of war, also confederation and hostility, the last book on games of chance, auguries, poetry, elegies, old age, good manners, and nobility of character.

The following is a list of chapters :—

One leaf is missing.

Fol.	
1*a*	باب فى الذُّبابِ . . . . .
4*a*	الابيات فى الجرَادِ . . . .
6*a*	الابيات فى النحهل و العسل . .
12*b*	الابيات فى الجُعَلِ . . . .
13*b*	الابيات فى القُرادِ . . . .
16*b*	الأبيات فى النَمْلِ . . . .
17*b*	باب فى الضفادع و الحِيتانِ . . .
23*a*	الابيات فى الظَّربانِ . . . .
27*b*	الابيات فى القُنْفُذِ . . . .
25*a*	الابيات فى الجِرْذانِ و الفأر . .
25*b*	الابيات فى الحِرْباءِ . . . .

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Fol.
27a . . . . الابيات فى الحيّة
33a . . . . الابيات فى العقارب
33b . . الابيات فى ضروب من لهوام
36a . . الابيات فى الشاء و المعز
After fol. 39 on leaf torn away.
41b . . الابيات فى الظباء و البقر
78b . . الصايد والحبالة و القترة
83b . . . الابيات فى الكناس
87b . . دخول الظباء الكنس فى الحرّ
86a . . . . . End of vol. iv.
Beginning of vol. v.
86b . . . . الابيات فى الوعيد
102b . . فى الدعاء بالشرّ و اليمن
105a . . . . . الايمان
108a . . . . العداوة و البغضاء
After 108 one leaf missing at least.
After 111 one leaf missing.
121a . . . . القيد و الغلّ
122b . . . . . End of Vol. V
At least one leaf torn away.

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Fol.
123*a* . . . . [الابيات فى الحرب]

133 shows that Kurrāsa 15 begins.

[143*a*. Now seventeen lines, custos showing that the 16th Kurrāsa begins, which show that eight leaves are lost; this should be fol. 151. These must have been lost before fol. 123.]

159*b* . . فى الطعنة والشَجَّة و الضَرْبَةِ

171*a* . . . باب المعانى فى الدِيَاتِ

175*b* . . . . . باب فى الثأر

181*a* . . . . . البَيْضُ و الدُرُوع

184*b* . . . باب فى القِسِىّ و السِهَامِ

197*a* . . . . باب فى السيُوفِ

203*a* . . . . Other paper to end.

204*a* . . . . . باب فى الرُمْحِ

209*a* . . . باب فى التُرس و المَنْجَنِيقِ

210*a* . باب فى الجِوَارِ و الحِلف و الإِغاثة

217*b* . . . باب فى العَدَاوَةِ والبَغْضَاءِ

224*b* هذا آخر ما وُجِدَ من المعانى فى كتاب
الحرب والحمد لله الخ وكان على ظهر
كتابِ الحرب بخطّ ابى محمد بن
قُتَيْبَةَ الخ

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Fol.
225a تم والحمد لله ربّ العالمين الخ End of sixth book.

225b . . . . . Blank.

226a السابع من كتاب المعانى لابن قُتَيْبَةَ وهو آخر الكتاب فيه المَيْسِرِ والشِعْرِ والشُعَرَاءِ والمراثى والشيب رالكِبَرُ والآداب وغير ذلك Title.

226b الابيات فى المَيْسِرِ . . .

231a. New Kurrāsa, apparently two leaves are missing in the preceding fold, but as the text goes on smoothly the original fold must have consisted of eight leaves only.

236b باب المعانى فى وصف الشعر والشُعَرَاءِ

238a ابيات المعانى فى التَطَيُّرِ والفَأْلِ .

241a ابيات المعانى فى وَصْفِ الآثار .

245a ابيات المعانى فى المراثى . . .

251a [الابيات فى الكِبَرِ] . . No title

257b ابيات المعانى فى الآداب . . .

265b الابيات فى مكارم الاخلاق . . .

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272. Last folio, much damaged, but not the end of the work; how much is missing cannot be said, but as fol. 271 begins the 29th Kurrāsa we may assume eight leaves, but from the title the subjects are practically finished.

The system followed by Ibn Qutaiba is to give one or more verses of classical poets, and explain the difficult words. Apparently he has had at his disposal a number of Diwāns, which he extracts, and for convenience sake he frequently gives several citations from various poems of one poet on the same subject before he cites another poet. The explanations very often appear copied straight from the copies of the Diwāns, so that the words "he said" do not refer to the author but to the commentator he has extracted. The number of poets quoted is very considerable, all are of the classical period, and his citations are important enough to say that the whole work deserves to be edited on the hand of the two available manuscripts. For the poet الطِرِمَّاح the India Office manuscript alone contains a considerable number of verses which were unknown to me when the text of the Diwān was printed, and I regret that I did not know at the time that this manuscript existed in the library of the India Office. He quotes largely from the poems of Huḍalis, al-A'šā, Ibn Muqbil, and many of the poets already edited, giving in many cases useful emendations of the texts printed. The book on war and war-implements would supplement in a large degree the valuable work of Schwarzlose on the weapons of the Arabs.

F. Krenkow.

ALPHABETICAL INDEX TO ARABIC TRADITION

Third Communication

1. Since the appearance of the second communication (JRAS. 1918, p. 548), the following gentlemen have joined

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the work: Dr. C. van Arendonk (Leiden); Rev. R. Bell (Beattock); Rev. J. Robertson Buchanan (Culross); A. Fück (Frankfort); W. Heffening (Frankfort); Rev. Brockwell King (Toronto); F. Krenkow (Quorn); Dr. L. Mayer (Berlin); Professor Dr. A. Schaade (Hamburg); Dr. A. Siddiqi (Aligarh); F. Taoutel (Paray-le-Monial); T. H. Weir (Glasgow).

Still the collaboration of more Orientalists remains desirable.

2. Large parts of Bukhārī's text have been treated. Nearly all the chapters are being prepared. Of the other collections, sundry pieces are finished.

3. It appears that of Dārimī's text at least one Oriental edition exists which is not inferior to those of the other authors. On this ground, as also with a view to the high cost of printing, Professor Snouck Hurgronji thinks it advisable to abandon the project of a new edition. As regards an edition of Ibn Mādja, a decision has not yet been arrived at.

A. J. WENSINCK.

LEIDEN.

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NOTICES OF BOOKS

THE ARCTIC HOME IN THE RIG-VEDA: AN UNTENABLE POSITION. By N. K. DUTT, M.A. pp. vii and 95. Dacca, 1918.

The object of this booklet is to refute the conclusions arrived at in the late Mr. Tilak's *The Arctic Home in the Rig-Veda*. The latter author followed the same method as those who seek to prove the Baconian theory of Shakespeare by picking out the data that seem to support their view, while ignoring all opposing evidence. In conformity with this plan Mr. Tilak sought to demonstrate from the *Rigveda* that the undivided Aryans lived somewhere within a few degrees of the North Pole, inasmuch as that ancient collection of hymns contains "clear and unmistakable references to Arctic phenomena". The refutation of so far-fetched a theory presents no great difficulties, but as far as I am aware no Western Vedic scholar has ever thought it worth his while to attempt the task. It is, however, satisfactory that an Indian should have undertaken it, for his countrymen may thus be more easily prevented from accepting the extravagant conclusions of *The Arctic Home*. Mr. Dutt has here, in reliance on sound, common-sense arguments, successfully accomplished his purpose. But beyond this I fear I am unable to find any merit in the present work. What strikes one most forcibly, both in *The Arctic Home* and in Mr. Dutt's criticism of it, is the futility of efforts to extract "history" from the *Rigveda* without possessing the necessary philological equipment. Historical conclusions of any value can be based solely on exact translations, which can only be produced by intimate familiarity with the grammar, the syntax, the metre, the accent, the vocabulary, and the mythology of the *Rigveda*. Neither Mr. Tilak nor his critic shows any such qualification. To substantiate this assertion in the case of Mr. Tilak would be superfluous here, but it

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seems necessary to adduce a few of the mistranslations with which Mr. Dutt's book teems. Thus *cakrám iva . . . á vavṛtsva* (iii, 61. 3) is rendered "thou movest like a wheel"; it should be "roll hither like a wheel", *á vavṛtsva* being, of course, an imperative, not an indicative. The line *urvíṃ gávyūtim ábhayaṃ kṛdhī naḥ* (vii, 77. 4) is translated "render our pasture lands free from fear". Here one of the primary rules of grammar is infringed, an adjective in the neuter (*ábhayam*) being made to agree with a feminine substantive (*gávyūtim*). The correct translation is "make wide pasture, (make) safety for us". The rendering of the line *ápa dvéṣo maghónī duhitá divá uṣá ucchad ápa srídhaḥ* (i, 48. 8) is "for she, the wealthy goddess Dawn, the Daughter of the Sky, scatters the enemies and the oppressors". This should be "may the bounteous daughter of Heaven, the Dawn, drive away (with her light) hatred, away hostilities". The form *ucchad* is, of course, not indicative, but injunctive. The hemistich *ápa tyé tāyávo yathā | nákṣatrā yanti aktúbhiḥ* is rendered "those well-known thieves disperse, with night, like the stars". This rendering is contrary to the rules of both accentuation and syntax. The adverb *yáthā* when unaccented is equivalent to *iva*, and must then always be taken with the preceding word; an unaccented *yathā* at the end of one *Pāda* could not possibly be connected with the first word of the next. The passage must be translated "away, like thieves, go those stars with the nights". The rendering of nearly every stanza quoted by Mr. Dutt from the *Rigveda* suffers from similar inaccuracies and errors.

Unconscious of his limitations Mr. Dutt overestimates the importance of his achievements. Thus he thinks he has been the first to discover why the poets of the *Rigveda* express fear of the darkness of night; for he remarks: "to our great misfortune, none of the Vedic scholars, eastern or western, have in their efforts to discover the causes of such apprehensions ever fully entered into the history of the times. The real causes of these mighty apprehensions have not,

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therefore, been yet satisfactorily explained by any one." Vedic scholars who read the *Rigveda* know pretty well that the fear of darkness was due chiefly to the attacks of wild animals and robbers, because this is expressly stated in the hymns; but they have probably wished to avoid the statement of platitudes.

Mr. Dutt seems to be firmly convinced that his conjectures on the obscure question of the "Five Tribes" represent historical certainty. Thus he says: "the Rigveda is quite clear in its utterances about the identity of the Five Tribes." The *Rigveda* tells us that the Five Tribes lived on the Sarasvatī, but Mr. Dutt's remark that "the five tribes formed a clan [!] by themselves quite distinct from those who dwelt on the tributaries of the Indus" does not advance matters much, for he does not even attempt to identify them with any of the many Aryan tribes mentioned in the *Rigveda*. This cannot, in fact, be done owing to the fragmentary and obscure nature of the evidence regarding the Five Tribes and their relations with King Sudās. Mr. Dutt asserts that the present writer is in this connexion "entirely wrong", "is guilty of unpardonable confusion", has committed "another serious blunder", and that "Dr. Macdonell's account is full of gross historical blunders" or "palpable historical blunders" (pp. 33 and 37), and that one of his statements is "entirely unsupported". These strictures are directed against the very brief account of the tribes of the Rigveda given in my *History of Sanskrit Literature*, which was published twenty years ago (1900). Some of my suggestions there put forward may be erroneous. But perhaps Mr. Dutt is not aware that in criticizing any writer's views he ought to take the latest statement of those views into consideration. Such a statement is to be found in Professor Keith's and my *Vedic Index*, which appeared twelve years later (1912), and in which all the evidence concerning the five tribes and their relations with King Sudās are collected and discussed.

Mr. Dutt's inaccuracy runs uniformly through his book.

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It is very conspicuous in the transliteration of the numerous stanzas quoted from the *Rigveda*. These are printed without diacritical marks, without accents, nearly always without Sandhi, while words are occasionally omitted, or wrongly substituted for others, or are not separated. These combined defects often go so far as to render a passage utterly unintelligible and to necessitate reference to the Devanāgarī edition of the text for enlightenment. Here are a few examples: *urvim gavyutim abhoyam kridhinah* (for *urvíṃ gávyūtim ábhayaṃ kṛdhī naḥ*); *ushaw ucchat apa sridhah* (for *uṣá ucchad ápa srídhaḥ*); *apa tya tayavoh yatha nakṣatrah yanti uktibhih* (for *ápa tyé tāyávo yathā | nákṣatrā yanti aktúbhiḥ*); *vivarthayantim vhuvanāni vishva* (for *vivartáyantīm bhúvanāni víśvā*); *vairat agni dideehi* (for *revád agne didīhi*); *tamasha antah* (for *támasó 'ntāḥ*) (p. 55).

The same carelessness appears in single Vedic words mentioned throughout the book; thus *Shunahshwepa* twice (p. 94) stands for *Śunaḥśepa*; *Bharadvāja* becomes *Varadwaja* (p. 6); *Druhyu* constantly appears as *Druhya*, the *Druhyus* become the *Druhsus* (p. 34), and the *Tṛtsus* the *Tristus* (p. 30) or *Tristsus* (p. 32). The river *Śutudrī* is variously mentioned as the *Satudri* (p. 25), *Satadru* (p. 3), and *Satadri* (p. 10); the river *Paruṣṇī* is at least five times called the *Purushni* (pp. 3, 28, 35, 36). The *Ārjīkīyā* becomes the *Arjikia* (p. 3) or the *Arjakia* (p. 12), and is identified with the *Vipās*, the modern *Biäs*—an improbable conjecture. The *Bipas* (*Vipāś*) itself is said to be the *Ravi* (p. 21), which is really the *Paruṣṇī*. This he himself elsewhere (p. 3) admits, when he identifies it with the *Irāvatī* (i.e. the *Ravi*).

Mr. Dutt is careless in regard to the meaning of Vedic words, even common ones; thus (p. 94) he translates the infinitive *ánu étave* "to go repeatedly", and bases an argument on this sense; but there is absolutely no reason to give this compound verb any but its natural and invariable meaning of "to go after or along", "to follow" (a path). In many other cases he seems to be quite ignorant of the results of

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research in regard to the meanings of Vedic words; thus he translates *pārāvata-ghnī* as "destroyer of both banks", and *vadhrivāc* as "garrulous". Of the latter word he says: "in the Rig-veda the word *vadhrivachah* 'garrulous' has always been applied to the non-Aryans." As a fact this word occurs only once in the *Rigveda*, and is there (vii, 18, 9) only applied to "enemies" (*amítrān*). Even if it did mean "garrulous", how could this possibly prove that these enemies were non-Aryans? These non-Aryans were, Mr. Dutt thinks, Shruta (*śruta*), Kavash (*Kavaṣa*), Bridha (*vṛddha*), Druhya (*Druhyu*), and Ayu (?), a list which he enumerates several times (p. 34, etc.). But what reason has he to suppose that *śruta* here does not mean "famous" and *vṛddha* "old"? And where is *Ayu* in this connexion to be found in the text of this hymn? Can *Anu* possibly be meant? But even if all these five are proper names, how is it, supposing them to belong to non-Aryans, that they are apparently all Sanskrit? Again, Kavaṣa occurs only once in the *Rigveda*, and (as a singular) the name of an Aryan man, not even of a tribe.

This review may be thought much too long for so small a book. It is, however, only a somewhat detailed criticism that can show how foolish it is for students of the *Rigveda* who do not possess the necessary philological equipment to engage prematurely in "research" which they may otherwise delude themselves into thinking is "historical", and how little value there can be in scholarship which lacks the fundamental qualities of consistency and exactness.

A. A. MACDONELL.

TALES OF THE SAINTS OF PANDHARPUR. By C. A. KINCAID, C.V.O. Humphrey Milford Publisher. Oxford University Press. 1919.

This is a translation of some short notices of Mahratta saints, who lived in a sacred town in the Sholapur district of the Bombay Presidency. The originals were written in the Mahratta language by a poet named Mahapati, who belonged

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to Ahmadnagar. Some of the notices are interesting, but they do not appear to be genuine folklore or to be of great antiquity, for Mahapati was born in 1715, and we are not told where he got his facts. The introduction by Mr. Kincaid contains an interesting account of Mahapati. Some of the saints described were not Mahrattas, and apparently had little or no connexion with Pandharpur. For instance, we have notices of the weaver Kabīr, who belonged to Northern India and was by birth a Muhammadan, and of Jayadeva, who was a native of Bīrbhūm. Of Kabīr, who was so catholic in his sympathies that both Brahmans and Sunnis wanted to perform his funeral rites, there is a short notice in Abu-l-faẓl's *Ayīn Akbari* (Jarrett's translation). Jayadeva, though apparently a Bengali, is claimed by Mahapati to have been a native of Orissa (p. 18). The mixture of saints from various parts of India in native hagiologies is interesting, as showing that after all there is, and always has been, a bond of unity between the inhabitants of Bhāratavarsha. In Greece the bond was the Olympic games, in India it was the pilgrimages. In spite of the affected contempt of northern Indians for the people of the Gangetic Delta, some Bengali saints are held in high honour all over India. Saints, both Hindu and Muhammadan, are great wanderers. One Bengali settled in the Maldives and another in Sylhet.

Though there is a wearisome sameness in most of the stories, arising, perhaps, from the fact that they are all the production of one man, one or two have characteristic features. Thus, in the story of Bhamdas and Ramaraj, which is connected with the famous city of Vijayanagar, there is a trait which reminds us of the Christian Gospels. Ramaraj, who was the last king of Vijayanagar, and who fell at Talikota in 1565, was wroth with Bhamdaṣ for an alleged act of theft, and ordered him to be impaled. The guards took him away, and, just as Jesus Christ was compelled to carry His cross, so was Bhamdas made to bear on his shoulder the massive stake on which he was to be tortured. But a miracle occurred as soon as the

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post was driven into the ground! The wood threw out leafy branches, and on these appeared ripe fruits and fragrant flowers (p. 42).

H. BEVERIDGE.

September 23, 1920.

ANNALS OF THE BHANDARKAR INSTITUTE, 1918–19 and 1919–20. Vol. I, Pts. 1 and 2. 8vo. Poona, 1919–20.

"The object of this Institute," says Sir R. G. Bhandarkar in his masterly Inaugural Address, which is printed as the first paper in these *Annals*, "is to promote, among its members, a spirit of inquiry into the history of our country—literary, social, and political—and also to afford facilities to outsiders engaged in the same pursuit." If one may judge from the *Annals* now before us, this object is in a fair way to be fulfilled, for the papers contained in them are generally scholarly and instructive. In Part 1 Sir R. G. Bhandarkar's Inaugural Address, full of sound criticism and wise guidance, is followed by a note by Mr. K. B. Pathak in support of his view that Śākaṭāyana composed the Amōgha-vṛtti under Amōgha-varṣa I; a translation of M. Sylvain Lévi's paper on the phrase *tatō jayam udīrayēt*; Dr. V. S. Sukthankar's important essay, "On the Home of the so-called Andhra Kings" (i.e. the Sātavāhanas), which he locates to the west of the Āndhra-dēśa and in the neighbourhood of Bellary; a translation of Professor Meillet's article on the root *lubh*; "An Attempt to determine the Meanings of certain Vedic Words," by Mr. V. K. Rajwade, who discusses *āhanas*, *vihāyas*, *kṛpā*, *mēhanā*, *citra*, and *sasni*; a paper by Dr. Sukthankar on the Besnagar inscription of Heliodoros, in which he makes some corrections of the text, and ingeniously accounts for the unusual order of the Prakrit words by the supposition that they were translated word-for-word from Greek; and a study of the chronology of the late Imperial Guptas by Mr. R. D. Banerji. Part 2 contains: "The History and Significance of Upamā," by Mr. V. S. Sowani, an

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interesting study of the technical term *upamā* from Vedic times; "Puṣyamitras in Gupta Period," by Mr. H. R. Divekar, who makes the plausible emendation *yudhy=amitrāṁś=ca* (alas, shockingly misprinted on p. 101) for Dr. Fleet's reading *Puṣyamitrāṁś=ca* in CIG. iii, p. 55; a "Comparison of the Bhāṣyas of Śaṅkara, Rāmānuja, Kēśavakaśmīrin, and Vallabha on some crucial Sūtras", by Mr. R. D. Karmarkar; "The Organism of the Muslim State under the Caliphs," by Dr. S. Khuda Bukhsh; a report by Mr. N. B. Utgikar on the work being done at the Bhandarkar Institute in the critical examination of the Devanāgarī recension of the Mahābhārata for the projected Pant Pratinidhi edition, in which he gives some noteworthy results of the comparison of the MSS. of the Sabhā-parva; and "The Sañjamamañjarī of Mahēsarasūri", by Dr. P. D. Gune, who gives us the text of a little Apabhraṁśa poem on Jain morals with its Sanskrit *chāyā* and some grammatical notes. There is likewise much of interest in the reviews and notices and the miscellaneous and editorial notes. With so much good material it is to be regretted that in technical "get-up" these *Annals* leave something to be desired. The proof-reading has not always been as rigorous as it should be; and the neglect to use the signs of length over long words in transliterated Sanskrit words has sometimes led to deplorable results in Part 1, from which Dr. Sukthankar has been the chief sufferer.[1] Otherwise the *Annals* are full of promise.

L. D. Barnett.

The Dream Queen: a Translation of the Svapnavasavadatta of Bhasa. By A. G. Shirreff and Panna Lall. 12mo; pp. v, 55. Allahabad: Indian Press. 1918.

This little book contains a rendering in English blank verse of the first of the interesting old dramas published by

[1] An awful example of this is seen on p. 62, where he is made to assert that the last word of l. 3 of the Besnagar inscription is and is not *Takhasilakena*. Lack of Greek type, too, has compelled Dr. Sukthankar to transliterate Greek sentences into roman, and with these the printers have played havoc.

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Pandit Ganapati Sastri in the Trivandrum Sanskrit Series in 1912 foll. The alleged authorship of Bhāsa, on which I have already expressed my opinion in the columns of this Journal, is accepted by the translators in unquestioning faith, with all its consequences. Their version will certainly be useful in introducing readers who have little or no Sanskrit to a fine old play on a typically Indian theme. As their rendering is in verse, it is necessarily paraphrastic, and so *pallava-grāhi* criticism as regards its verbal accuracy in details is disarmed. Something, however, may be said about its general literary character. The original play consists of lively prose dialogue in Sanskrit and dialect, interspersed with spirited stanzas; and for this Mr. Shirreff, who takes upon himself the responsibility for the versification, has substituted blank verse throughout. He may claim the same credit as the Aristophanic Euripides:—

ἔλεγεν ἡ γυνή τέ μοι χὠ δοῦλος οὐδὲν ἧττον
χὠ δεσπότης χἠ παρθένος χἠ γραῦς ἄν,

to which, though we will not make the same retort as does Æschylus in the play, we must reply that the effect is distinctly monotonous. Mr. Shirreff gives us poetry of limited liability: his muse is inspired by no Bacchic fervour to fly to the mountain-tops, but walks slowly and cautiously along the plains. Such a course has its disadvantages for the reader.

L. D. BARNETT.

ANNALS AND ANTIQUITIES OF RAJASTHAN. By Lieut.-Col. JAMES TOD. Edited by WILLIAM CROOKE, C.I.E., D.Sc. Three vols. Oxford University Press, 1920.

Tod's great work on Rājputāna has long ago taken rank as a classic, and its enduring value is unquestioned; yet to the present generation of readers it is rather an object of veneration than a familiar friend. This is due partly to its prolixity (the edition under review runs to over 1,900 pages),

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but mainly to the fact that the original issue (1829–32) has long been scarce and expensive, while no satisfactory reprint has been available. The enterprise of the Oxford University Press has removed this difficulty, and we have now just such an edition as was wanted—at once handy, complete, and scholarly. For Dr. Crooke's editing no praise can be too high. His only interference with the text consists in modernizing the spelling of names and in substituting more correct translations in the case of quotations from such works as Jahāngīr's *Memoirs*. His own notes are succinct and apt, and lend the reader invaluable assistance by pointing out where Tod has fallen into error or where his statements have been corrected by later discoveries. An introduction of twenty pages gives an account of the author's life and an estimate of the merits and defects of his work. All the illustrations (the originals of which are mostly in the possession of the Royal Asiatic Society) have been reproduced, of course on a smaller scale; while five fresh ones have been provided, including three portraits of the author. One of these—an Indian drawing showing Tod at work on his book with his Jain Guru—is of special interest.

W. F.

Les Grottes de Touen-houang. Peintures et Sculptures bouddhiques des époques des Wei, des T'ang et des Song. By Paul Pelliot. Paris: Geuthner. Vol. I, 1914; Vol. II, 1920.

It is somewhat disconcerting to have the task of reviewing a book of which only the pictures have yet appeared. Two portfolios, containing 128 plates, comprise this the first instalment of the reported investigations of the Mission Pelliot in Central Asia. The first portfolio (or volume) is prefaced with two short notices by M. Pelliot and a plan; but the plates bear no descriptive label beyond one identifying the grotto to which each belongs, and, until the publication of the text, the reader must possess himself in

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patience for the author's commentary on and explanation of the scenes portrayed and the chronological order of their execution. That the completed work will be of the highest importance the author's distinguished reputation is sufficient warranty.

Meanwhile all can admire the technical excellence of the photographs reproduced and the intrinsic beauty of the designs; the student of Buddhist iconography can find plenty of problems to tackle; and the art critic can exercise his judgment in attempting to trace in true sequence the progress of Chinese religious painting through six centuries of its greatest splendour.

The itinerary of the Mission Pelliot took three years to complete. More than a third of that time, from February, 1907, to May, 1908, was spent at Tun-huang. It is common knowledge that this town and oasis on the edge of the desert of Lop has figured in the accounts of other explorations made during the previous thirty years; but the Mission Pelliot was the first to carry out a detailed and systematic examination of the frescoes and images existing in a series of grottoes, known as the Caves of the Thousand Buddhas, cut in the side of a cliff distant from the town nine miles to the south-east.

Since the beginning of its history some 2,000 years ago, Tun-huang has passed through many vicissitudes. As mentioned in chapter 123 of the *Shih Chi*, it formed part of the territory of the Ta Yüeh-chih till they were conquered and displaced by the Hsiung-nu in the middle of the second century B.C. A few years later the successful campaigns of the Emperor Wu Ti added it to the Chinese Empire. For a short while at the beginning of the fifth century it was the capital of the Western Liang. The Tibetans captured it towards the end of the eighth century, but soon it was regained by China. Some 500 years after that the great Mongol invasion swept over it, and within the last fifty years its inhabitants were decimated by the Mahomedan rebellion.

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To the present day Tun-huang remains the westernmost outpost of China proper, standing as it does on the furthest edge of the projection of Kansu, where that province and Eastern Turkestan meet. Through it has always passed the great highway between China and the West, and hence it is that this small place figures so largely in Chinese history. Many great travellers are associated with Tun-huang: Chang Ch'ien, Fa Hsien, Hsüan Tsang, and Marco Polo are perhaps the best known to us. The shrines mentioned in the travels of the two last are doubtless those represented in the portfolios under review. Probably, of course, it is committing an anachronism to connect Chang Ch'ien with Tun-huang as a settlement of that name; for it was not colonized by Chinese till twenty-seven years after he started on his mission. But we learn from the *Shih Chi* that he set forth from Lung-hsi and crossed the territory of the Hsiung-nu, and therefore it seems likely that he followed the route subsequently used by the army under Li Kuang-li in 104 B.C. and by other expeditions about that time.

M. Pelliot's promised account of the history of the oasis apart from the grottoes will be looked forward to with keen interest. Enough has been said here to indicate the peculiar significance of Tun-huang as the meeting-place of Chinese and foreign cultures; indeed, through it lay the path of China's communication with all outside civilizations during many centuries of her early authentic history. Chinese, Greco-Indian, and Irānian elements are found mingled in the wonderful frescoes adorning the walls of its cave-temples; but the several elements have become welded together and sinicized, and here is to be seen an unrivalled array of Chinese Buddhist art at its zenith displayed through a less trammelled and more sympathetic medium than that used in the examples upon which our knowledge of Buddhist art under the Wei, T'ang, and Sung has hitherto had mainly to depend, apart from the paintings brought from the same place by Sir Aurel Stein. For the brush is *par excellence* the tool of Chinese artistic expression, and far transcends the sculptor's chisel.

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I have hinted that Gandhāran influence is visible in the frescoes of Tun-huang. The nimbus, figure drapery, and Apollo-like countenance that characterize the Gandhāran school are all to be seen, though not to the exclusion of other foreign types. There is, for example, a version of Amitābha in essentially Indian form with bared right shoulder (plate 84) side by side with other scenes exhibiting pronounced Hellenistic features. The influence of Gandhāra is a strong one; but the artists who decorated the caves were not merely reproducers of a foreign tradition. The plastic may be foreign, yet the religious inspiration is often Chinese, in so far as it arises from a form of Buddhism which underwent special development and elaboration in the land of its adoption. Thus a subject several times represented is Ching-t'u, the Sukhāvatī paradise presided over by O-mi-to (Amitābha). It is doubtful whether Amitābha appeared at all in the Gandhāran sculptures. The promise of a future life of bliss in the Pure Land or Western Paradise of O-mi-to is a Mahāyānist doctrine, though, as the author of *Buddhist China* has pointed out, some of its elements can be traced to Hīnayānist origins. Visions called up by this development of Buddhism—a religion of salvation by faith—powerfully stimulated Chinese artists to lavish their genius on depicting the merciful compassion of a personal deity and the glories of the promised heaven accessible to all. He is shown surrounded by saints amid literal representations of those transcendent beauties and sensuous delights of his realm that are described with such wealth of detail and imagination in the *Large* and *Small Sukhāvatī-vyūha* and the *Amitāyer-dhyāna* sūtras. But even in this and in other subjects of devotional worship the artists have refrained in some particulars from repeating foreign formulæ. Musicians play on instruments which, except the harp, are of ancient Chinese kinds, and architectural forms are almost entirely Chinese.

The copying of foreign models stops when the figures are not objects of actual worship. Thus episodes in the life of

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Buddha are shown in frankly sinicized form. Lay scenes commemorating the donors of certain shrines provide not only magnificent examples of purely native art during this early period, but unique documents of peculiar archæological value. Here, at any rate, we may find the national tradition untouched by outside influence.

It is satisfactory to learn from M. Pelliot that the subjects of the scenes and the dates of their execution are established by accompanying inscriptions. The publication of the completed account of the grottoes of Tun-huang will be an event of supreme importance to all students of Far Eastern art.

W. Perceval Yetts.

Short Notices of some Recent Books on Persian Subjects

The Secretary of the R.A.S. having requested me to notice briefly the most important books connected with Persia which have recently come under my notice, I select the nine following—two in English, two in French, four in German, and one in Persian. Of these, four deal with literary topics, two with economics, and one with philosophy, while two are Festschrifts of miscellaneous contents. I shall consider them in this order.

I. Literature

(1) *Firdawsí and the Sháhnáma*

Twenty-four years ago Professor Nöldeke contributed to Geiger and Kuhn's great encyclopædia of Persian philology and literature, the *Grundriss der Iranischen Philologie*, the article entitled "Das Iranische Nationalepos", which has ever since remained the last word on all matters connected with the Persian epic and its final expression, the *Sháhnáma* of Firdawsí. Although the lapse of nearly a quarter of a century has impaired neither the freshness nor the accuracy of this masterly monograph, and though few fresh materials except Hermann Zotenberg's edition and translation of

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ath-Tha'álibí's account of the ancient kings of Persia [1] in his *Kitábu'l-Ghurar* were available, Professor Nöldeke, at an age when most scholars of so great a reputation are content to rest on their laurels, has entirely revised and rewritten it, with considerable additions and modifications, and the new edition, the preface to which was written in Karlsruhe last July, has now been published, by the aid of the Heidelberg Academy, at Berlin and Leipzig. On the special difficulties and discouragements surrounding the completion of this work, at which the author hints in his preface, it is needless to enlarge; they are patent to all who are acquainted with the circumstances, and do but increase our admiration for the indomitable courage and untiring devotion to learning which have triumphed over all obstacles and placed us all under a fresh obligation to one whose achievements are surpassed by no living Orientalist.

(2) *Early Persian Poetry from the beginnings down to the time of Firdawsí*

Professor A. V. Williams Jackson of Columbia University is well known to all students of Persian by his admirable work on *Zoroaster, the Prophet of Ancient Iran*, and by several accounts of his travels in Persia and the neighbouring countries in 1903, 1907, 1910, and 1918. The present work, published this year by the Macmillan Company, New York, comprises, besides prefatory matter, ten chapters, of which the first deals with "Persian Poetry of Ancient Days" (600 B.C.–A.D. 650), and the remainder with post-Islamic poetry from the dawn of the Persian Renaissance to Firdawsí. The author follows the late Dr. Ethé (of whose diligent compilations on the work of the early Persian poets he has made good use) in accepting as genuine the *qaṣída* said to have been composed by 'Abbás of Merv on the occasion of al-Ma'mún's visit to that city in A.D. 809, but the scepticism of Kazimirski in this matter still

[1] Paris, 1900.

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seems to me to be justified. The verses ascribed to Ḥanẓala of Bádghís on p. 19 are, on the other hand, almost certainly genuine, so that we may safely place the beginnings of post-Islamic Persian poetry at least as early as A.D. 850. As regards Shahíd of Balkh (pp. 24–6), there seems some reason for identifying him with a philosopher who, as we learn from the *Fihrist* and al-Qifṭí's *Ta'rikhu'l-Ḥukamá*, became involved in a somewhat violent controversy with the great physician Abú Bakr Muḥammad ibn Zakariyyá ar-Rází. Professor Williams Jackson has given fresh verse-translations of all the poems which he cites, some of which are very felicitous. This little volume (it comprises only 125 pages) forms an admirable introduction to the study of the older Persian poetry, and gains much by the author's familiarity with the ancient literature of Zoroastrian Persia, a realm too often closed to the student of the later language and literature.

(3) *Jalálu'd-Dín Rúmí*

The great mystical Mathnawí (*Mathnawí-i-Ma'nawí*) deserves the title of "the *Qur'án* in the Pahlawí (i.e. Persian) language" which the Persians have assigned to it; it is the most profound, if not the most beautiful, poem in Persian, and its author, the founder of the Order of Mevleví (Mawlawí) or so-called "Dancing Dervishes", is one of the greatest mystical poets of the world. The best extant biography of him and his predecessors and successors is the *Manáqibu'l-'Árifín*, composed in the first half of the fourteenth century of our era by Shamsu'd-Dín Aḥmad Aflákí. This book remains unpublished, and MSS. are not very common: there are two in the British Museum,[1] and another, besides a later abridgement, in the Library of the India Office.[2] The late Sir James Redhouse published an English translation of selected extracts from this work, entitled by him "Acts of the Adepts", as an introduction to his translation of Book i of the *Mathnawí*

[1] See Rieu's *Persian Catalogue*, pp. 344–5.
[2] See Ethé's *Catalogue*, cols. 257–60.

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(Trübner, 1881), but since that time no further work seems to have been done on the book until M. Clément Huart conceived the happy idea of publishing a complete French translation of it made from a MS. in his own library transcribed in A.D. 1608. Of this translation the first volume, entitled *Les Saints des Derviches Tourneurs*, was published by Leroux of Paris in 1918. It contains the first three of the ten chapters into which the book is divided, including the longest and most important (chap. iii, pp. 59–375), dealing with Jalálu'd-Dín Rúmí himself. M. Huart has treated the book, as he himself says (p. iii), less from the point of view of history than from that of psychology, and he has prefixed to it a short but excellent table of the different psychic phenomena (dreams, premonitions, second sight, telepathy, etc.) mentioned in the course of the work, thus following the excellent precedent set by D. M. Macdonald in his luminous *Religious Attitude and Life in Islám* (Chicago, 1909). It is earnestly to be hoped that M. Huart may complete the work which he has undertaken.

(4) *Shaykh Sa'dí of Shíráz*

To M. Henri Massé, Docteur es-Lettres et Chargé de Cours à la Faculté des Lettres (Alger), we are indebted for a copious and careful study of the most popular and widely read of all Persian writers entitled *Essai sur le poète Saadi* (Geuthner, Paris, 1919). The first chapter (pp. 3–102) deals with his life; the second (pp. 103–30) with his works and the printed edition of them published at Calcutta in 1791; and these two chapters constitute the first part of the book. The second part consists of four chapters entitled respectively "l'Homme Social" (pp. 135–164), "l'Honnête Homme" (pp. 165–221), "l'Observation du Monde extérieur" (pp. 222–236), and "les Moyens d'expressions" (pp. 237–256), followed by a Conclusion (pp. 257–268), an excellent and most useful Bibliography (pp. iii–lii), and an appendix showing the indebtedness to Sa'dí of European men of letters from La Fontaine onwards (pp. liii–lvii). This last, which contains

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matter that will be new to many Persians scholars, does not profess to be complete, but only to offer "isolated examples tending to prove Sa'dí's fame in Europe". The whole book is very well done, showing industry, judgment, grasp, orderly method, and a sane and well-balanced criticism, and is one of the best monographs on a great Persian poet and writer which have been produced in recent years. It is hard to better Renan's summary of the qualities to which Sa'dí owes his wide and enduring popularity, quoted on p. lvii of the Appendix: "Saadi est vraiment un des nôtres. Son inaltérable bon sens, le charme et l'esprit qui animent ses narrations, le ton de raillerie indulgente avec lequel il censure les vices et les travers de l'humanité, tous ces mérites, si rares en Orient, nous le rendent cher. On croit lire un moraliste latin on un railleur du xvie siècle."

II. Economics

From Berlin come the two following notable books, one in German and one in Persian, dealing with economic and incidentally with political conditions in Persia.

(5) *Persien von der "Pénétration pacifique" zum "Protektorat": Urkunden und Tatsachen zur Geschichte der europaïschen "Pénétration pacifique" in Persien*, 1860-1919, *von Wilhelm Litten* (*Berlin and Leipzig*, 1920).

The author, as he informs us in his Introduction, had begun to prepare this book some six months before the outbreak of the War, the vicissitudes of which carried him from Tabríz by Mosul to Baghdád, thence back to Tihrán by way of Kirmánsháh, thence through Aleppo to Germany and the Western Front, where he was wounded on the Somme and brought as a prisoner of war to London, whence he presently found his way by exchange to his own country. Circumstances, he implicitly admits, have rendered the questions treated in his book of less immediate practical importance to his country than he hoped and anticipated when he began it, but they have not affected the objective value of a very

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careful and systematic study of the concessions obtained and the commercial enterprises undertaken by the various European Powers in Persia during the last sixty years.

The book comprises three parts and a conclusion, preceded by a full table of contents and illustrated by twelve maps. The first part (pp. 2–222) treats of foreign undertakings, concessions, and investments in Persia, to wit, those of England (pp. 2–109); Russia (pp. 110–190); Greece (pp. 191–4); France (pp. 195–206); Belgium (pp. 207–214); other States (pp. 215–216), *viz.* Austria, Italy, Holland, Turkey, America, and Switzerland; and Germany (pp. 217–222). The second part (pp. 225–348) contains remarks on the political and economic situation in Persia; while the third (pp. 350–396) deals with the possibilities and prospects for German enterprises in that country. This last part (chs. 65–71) was already written in February, 1914, six months before the outbreak of war; two additional chapters (72 and 73), constituting the *Schlusswort*, were added after its conclusion. The first of these deals with Persian Nationalism, Persian Islám, and the protection of German rights in Persia; the second with Persian politics since the Armistice and the Anglo-Persian Agreement of August 9, 1919, the text of which, in English, with the correspondence connected therewith, forms an Appendix. Herr Litten's book is the most important contribution to the economic history of Persia since the publication at Rome twenty years ago of Lorini's *La Persia Economica contemporanea e la sua questione monetaria.*

(6) *Ganj-i-Sháyagán, by Sayyid Muḥammad 'Alí Jamál-záda (Káwa Press, Berlin,* 1335/1916–17)

گنج شایگان یا اوضاع اقتصادی ایران باهتمام مخصوص آقای سیّد محمّد علی جمال زاده (از سلسلهٔ انتشارات ادارهٔ "کاوه": برلین ۱۳۳۵)

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This well-arranged and beautifully printed volume of more than 200 quarto pages is a good specimen of the modern practical handbooks which, under the pressure of fifteen agitated and eventful years, young Persia, no longer content with philosophical speculations and mystical reveries, is beginning to produce. In fifteen sections it deals with such matters as the physical geography of Persia, her commerce, imports, exports, customs, roads, transport, mines, arts and crafts, improvements (especially agriculture and forestry), new enterprises, expenditure, revenue, the Budget, coins, weights and measures, posts and telegraphs, and life and current prices in Tihrán. An appendix contains an account of Persian commerce during the years A.H. 1331–2 (A.D. 1913–14) and during the years of the War, and a history of some of Persia's treaties and agreements with Foreign Powers. A good index and several maps and tables complete a very useful and well-produced work.

III. Philosophy

(7) *The Secrets of the Self* (Asrár-i-Khudí) *by Sheikh Muḥammad Iqbál, translated from the original Persian with Introduction and Notes by Reynold A. Nicholson, Litt.D., LL.D.* (1920).

It is a sufficient testimony to the originality of the surprising philosophical doctrine embodied in this poem that Dr. Nicholson, the greatest living authority on the Súfí mysticism to which it stands in such violent antagonism, should have deemed it worth translating and explaining. Muḥammad Iqbál came to Europe some fifteen years ago to pursue his philosophical studies at Cambridge and Munich, and in 1908 published his valuable dissertation on the development of metaphysics in Persia. He has since then evolved a philosophy of his own, which, as Dr. Nicholson says (p. x), "owes much to Nietzsche and Bergson" and very little to the Neo-Platonists and their Eastern successors. Yet it is by no means a Western philosophy, but rather a philosophical Pan-Islamism, designed to cure the ills of quietism, self-

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suppression, and pantheism, which, according to the author's view, have emasculated the adherents of the once virile doctrine of the Arabian Prophet. "His message," says Dr. Nicholson, "is not for the Mohammedans of India alone, but for Moslems everywhere; accordingly he writes in Persian instead of Hindustani—a happy choice, for amongst educated Moslems there are many familiar with Persian literature, while the Persian language is singularly well adapted to express philosophical ideas in a style at once elevated and charming." The poem itself is modelled on the *Mathnawí* of Jalálu'd-Dín Rúmí, for whom, in spite of his mysticism and quietism, Muḥammad Iqbál has a great admiration, though of Ḥáfiẓ he uttered a harsh judgment (omitted in the second edition of the poem) which caused anger and consternation in many literary circles in India. The book is not only remarkable in itself, but may, as Dr. Nicholson implies, have far-reaching effects on Muslim thought and character, while the English prose rendering has all the grace and felicity which we are accustomed to expect from the translator.

IV. Two Festschrifts

In the spring of 1916 two great German Orientalists, Professors Nöldeke and Andreas, celebrated respectively their 80th and 70th birthdays, which in each case served as the occasion of a *Festschrift* in their honour produced by such of their colleagues and disciples as were not prevented by the calamities of those fateful days from contributing their tribute of respect.

(8) *Festgabe für Theodor Nöldeke zum achtzigsten Geburtstage* (*Göttingen, den* 2 *März*, 1916)

The contributors to this volume are F. C. Andreas ("Vier persische Etymologien"), C. H. Becker ("Das Reich der Ismaeliten im koptischem Danielbuch"), C. Bezold ("Abbā Gabra Manfas Qeddus"), I. Goldziher ("Über Ijmā'"), M. Lidzbarski ("Neue Götter"), E. Littmann ("Anredeformen in erweiterer Bedeutung"), and K. Sethe ("Spuren

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der Perserherrschaft in der späteren ägyptischen Sprache"). The first and last articles are of especial interest to the student of Persian.

(9) *Festschrift Friedrich Carl Andreas zur Vollendung des Siebzigsten Lebensjahres am* 14 *April*, 1916

Fourteen scholars have contributed to this volume, and half a dozen of the articles are more or less directly connected with the languages or literature of Persia. Two (by Geiger and Lommel) are concerned with the Avesta; one (by Larsen), illustrated by two plates, with Scandinavian imitations of Sásánian designs in tapestry; one (by A. Bertholet) on the question of the relation between Jewish and Persian beliefs concerning the Resurrection; one (by Christensen) on the traces of the legend of Manu in the Iranian national epic; and one (by Enno Littmann) on the legend of the angels Hárút and Márút so often met with in Persian literature. The volume concludes (pp. 137–42) with a brief but valuable article entitled "Beiträge zu einer Andreas Bibliographie", by Johan Eyser, extending over the years 1859–1916.

E. G. Browne.

The Kurmanji Grammar by Major E. B. Soane, C.B.E., seems likely to be of great value to students, but unfortunately there appears to be no Englishman save the author who is sufficiently conversant with the subject to review the book.

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OBITUARY NOTICE

James Drummond Anderson

WITHIN the last few months this Society has lost some of its most valued members. In our July number we mourned the loss of our Honorary Treasurer, Mr. Kennedy; in the October number that of one of our Vice-Presidents, Sir Charles Lyall; and now, again, it has to record the death, on the 24th November, 1920, less than a fortnight after the completion of his 68th year, of one of the members of its Council, Dr. Anderson.

The son of a doctor in the service of the East India Company, he was born in Calcutta, and was sent home, later than is now usual, at the age of 7. As was natural, he could at that time speak Bengali fluently, and that was, no doubt, the main reason for the intimate knowledge of that language possessed by him in later years. He was educated at Cheltenham and Rugby, and passed the Indian Civil Service examination in 1873, obtaining the highest marks among all the candidates for his English essay—a foretoken of the limpid English style of which in later years he was a master. His early service was spent in Bengal, but in 1880 he was transferred to Assam, where he passed through the various grades of District work, and also acted as Inspector-General of Police and, for a year, as an Assistant Secretary to the Chief Commissioner. In 1894 he returned to Bengal and served first as Collector and then as Commissioner of Chittagong, whence he returned to England for good in 1898, retiring in 1900. He was appointed teacher of Bengali at Cambridge in 1907, in which post he continued till his death, being given the honorary degree of M.A. in 1909, and later proceeding to the higher degree of Litt.D.

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Besides being a master of more than one Oriental language, he was an excellent French scholar, had studied at the Paris University, and had even lectured in French at the Institute. His learning and charm of manner in no small way helped to strengthen that Entente between English and French Orientalists which has been lately so happily cemented by the joint meetings of the two Asiatic Societies in London and Paris.

We have seen that nearly the whole of his Indian official career was devoted to the work of a District Officer, a position which of all others gives the fullest opportunities for learning to understand and appreciate the people amid whom a man's lot may be cast. In Anderson's case this resulted in a series of works of great value on the customs and languages of the Tibeto-Burman inhabitants of Assam. In 1885 there appeared what he modestly called *A Short List of Words of the Hill Tippera Language*, which was really an excellent comparative vocabulary of that form of speech and of Lushei and Bodo. This was followed, ten years later, by his best-known work, a delightful *Collection of Kachārī Folktales and Rhymes* (1895), and, in the following year, by his Vocabulary of the almost unknown Aka language.

But his greatest affection was for the tongue he had learned in his childhood. After his return from Assam to Bengal he brought out, in 1897, an admirable collection of proverbs and sayings in the Chittagong dialect of Bengali,[1] and all his subsequent writings on Oriental forms of speech were devoted to that language.

He became a member of this Society in the same year that he went to Cambridge, and since then the pages of our Journal have been enriched by many contributions on difficult points of Bengali grammar, idiom, and prosody. He kept up a frequent correspondence with the literary circle in Bengal,

[1] *Some Chittagong Proverbs*, compiled as an example of the dialect of the Chittagong District (Calcutta, 1897).

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of which Sir Rabindranath Tagore is an illustrious member, and took an active part in revealing to English readers of the *Times*, the *Spectator*, and other newspapers of this country the merits, and in justly criticizing the defects, of modern Bengali writings. Conversely, by his contributions to the *Englishman*, the *Pioneer*, the *Civil and Military Gazette*, and other Anglo-India periodicals, he helped to keep India in touch with the English and French points of view in regard to Indian subjects.

In 1913 he wrote for the Cambridge Press a short work on Indian ethnology, entitled *The People of India*, and a few months before his death he inaugurated the Cambridge Guides to modern languages with his *Manual of the Bengali Language*.[1] No work illustrates his mastery of this difficult form of speech more than the latter. Previous writers had founded their accounts on the works of their predecessors, each adding his own additions and corrections. But Anderson broke entirely new ground. He took the language as he found it in modern literature, and, without regard to theories of what Bengali ought to be, he described it as it is, with most illuminating results.

His home in Cambridge was a social centre where Indians and Europeans met on common ground and learned much from each other. Of many of the former he gained the warmest and truest affection. As one of them wrote to me on hearing of the news of his death, "his gentleness, sympathy, and kindness I shall never forget, and I do not know how to express my feelings of respect and gratitude for him."

The pages of a learned journal are hardly the place for an estimate of Anderson's personal character. But one who had the privilege of his friendship for many years may be allowed to remind its readers of qualities familiar to fellow-members of Council—of his charming, unselfish character, and of familiarity with his subjects, combined with a modesty too

[1] Reviewed on pp. 615 ff. of the *JRAS.* for October, 1920.

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great to allow it to be appreciated by those who were less intimate. In a letter to the *Spectator* [1] his old comrade Mr. Ritchie wrote: "At heart he was the most humorous, the most right-thinking, the most affectionate nature conceivable"; and to these words all who knew him will give the heartiest assent.

G. A. GRIERSON.

The Society has just lost one of its oldest members in the death of Dr. Codrington, Hon. Vice-President. An obituary notice will appear in the April Journal.

[1] December 4, 1920.

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NOTES OF THE QUARTER

(October–December, 1920)

The Council has elected Sir Henry Howorth as Vice-President in place of the late Sir Charles Lyall, and Dr. Gaster as the fourth Vice-President.

Mr. C. O. Blagden was elected Member of Council in place of Mr. Philby, who resigned on taking up an appointment in Mesopotamia, and Mr. W. P. Yetts in place of the late Dr. Anderson. The following 77 candidates were elected Members of the Society :—

Mr. W. Foxwell Albright, Ph.D.
Major C. H. Armbruster, M.A., C.B.E.
Mr. F. Anderson.
Rai Sahib B. N. Bannerjee.
Mr. D. K. Bhardvaj, B.A.
Mr. B. Bhattacharya, M.A.
Mr. A. K. Banerji, M.A., B.L.
Rao Bahadur S. T. Bhandara.
Mr. P. Basu.
Mr. H. Well-Blundell, M.A.
Mr. H. N. Bushia, B.A.
Rev. Canon Cooke.
M. Georges Coèdes.
Mr. H. C. Chakladar, M.A.
Mr. Basanta K. Chatterjea.
Mr. G. R. Driver, M.A.
Jubraj Deo S. S. Deo of Jashpur.
Babu Gokulnath Dhar, B.A.
Mr. R. Dayal, M.A., M.O.L.
Mr. A..B. Doniach.
Mr. C. Lloyd Elgood.
Mr. M. H. Ghorpaday.
Kunwar J. S. Gahlot.
Mr. S. K. Ghosh.
Mr. V. T. Raja Gopala.
Mr. B. M. Gwynn, M.A.
Babu K. M. Gupta.
Mr. K. P. Guru.
Rev. G. S. Hitchcock, D.D., etc.
Mr. Md. Ghulam Hassan.
Professor A. Hag.
Mr. M. A. K. Haidari.
Lieut. H. E. Jagoe.
Pandit Gopal Krishna, M.A.
Mr. Paul King.
Mr. R. Levy.
Baba R. C. Maitra.
Rev. J. Martin, Hon. C.F.
Mr. O. B. Mathur, B.Sc.
Mr. L. N. Mathur, B.A., L.T.
Mr. N. G. Majumdar.
Mr. D. B. B. Mudalier.
Pandit Lakshmi Misra.
Baba N. C. Nandi.
Mr. B. N. Navagire, M.B.
Mr. Brij Narayan, M.A.

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Rai Bahadur P.G. Nath, M.A.
Mr. V. M. Nawle.
Mr. A. C. Nag, B.A., B.L.
Mr. Fakirchand Pal.
Mr. C. C. Pothill.
Mr. M. B. Pithawalla, B.A., B.Sc.
Mr. Clarence Proctor.
Mr. M. H. Abd-al-Razik.
Dr. Suresh C. Ray, L.C., H.C.
Pandit B. Rai.
Mr. S. Charan Rai, LL.B.
Mr. K. Ramachandra Ramabhadran, B.A.
Mr. P. Sirkar.
Babu G. Sarkar.
Ram Babu Saksena, M.A., LL.B.
Mr. A. K. Sharma.
Professor M. Sinha, B.A.
Mr. Narpal Singh, B.A.
Mr. V. L. Sastri, B.A.
Mr. Michael Sidersky, B.A.
Lieut.-Col. R. Schomberg, D.S.O.
Mr. A. Siddiqi, M.A., Ph.D.
Professor W. E. Soothill, M.A.
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Mr. W. G. Urdhwareshe, M.A.
Mr. Sheoprasad Varma, M.A.
Mr. P. Bagchi Vidyabhusan, B.A.
Mr. G. N. S. Vanna.
Major L. M. Yetts, M.C.
Mr. David Yellin.
Mr. Md. Yusuff, B.A.

Sirdar Ikbal Ali Shah read a paper on November 9 entitled "Aurungzab Vindicated", and on December 14 Dr. R. A. Nicholson lectured on "Some Arabic Poets of the 'Abbasíd Period".

On January 18 Miss H. C. Bowser gives a lantern lecture on "The Buddhist Temples of the Diamond Mountain of Korea"; February 8, Miss Houston speaks of her experiences among the Bolsheviks in Russian Turkestan; while on March 8 Mr. Lane (late of the South Persian Rifles) reads a paper on "Nomad Tribes" of South-West Persia; and on April 12 Mr. Levy tells of a journey from Baghdad to Tehran.

The Society offers its congratulations to Sir George Grierson, Vice-President of Council, on the distinction of Honorary LL.D. recently conferred upon him by the University of Cambridge.

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The Council of the Royal Asiatic Society has decided to advance the price of its publications, including the Journal and offprints therefrom, by 25 per cent to all persons who are not members of the Society. Members will pay the same special prices as hitherto for books already published if they buy them direct from the Society for their own use.

In order to avoid small odd amounts the nearest sixpence above the figure so arrived at (i.e. the old price plus 25 per cent) will be taken as the new price. Thus a book published at 7*s.* 6*d.* will be sold retail at 9*s.* 6*d.*, not 9*s.* 4½*d.*

The Council has also decided to allow booksellers a uniform discount of 2*d.* in the shilling on all its publications. Non-members buying direct from the Society will pay the full retail price, or in the case of subscriptions to the Journal the full subscription.

The effect of the change will be to raise the retail price to non-members of single copies of the Journal from 12*s.* to 15*s.*, and the trade price from 9*s.* to 12*s.* 6*d.*

For subscribers who are not members the rate for current annual sets will in future be £2 8*s.*, whether the subscription is paid to a bookseller or direct to the Society, and the rate to the trade £2.

Offprints of papers in the Journal will in future be offered for sale at the following rates. Applications for offprints should be made as soon as possible after the article appears in the Journal to enable an order to be placed with the printers before the type is broken up. The printers have engaged to keep the type standing for three months for the purpose.

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Books

Ameen Rihani, The Luzumiyat of Abu'l-Ala. New York, 1920. *From the Translator.*

Ananga Ranga. Lahore. *From the Publishers.*

Antiquaries of London, Society of. Proceedings, 1918–19. 2nd series, vol. xxxi. London. *From the Publishers.*

Archæologia. Vol. lxix. Oxford, 1920. *From the Publishers.*

Archæological Report. Hindu and Buddhist Monuments. Northern Circle, to March 31, 1919. Lahore, 1920. *From the Government of India.*

Archæological Survey Report. Burma, 1919–20. Rangoon, 1920. *From the Government of India.*

Archæological Survey. Frontier Circle. 1919–20. Annual Report. Peshawar, 1920. *From the Government of India.*

Archæological Survey of India. Western Circle. Progress Report, 1919. Bombay, 1920. *From the Government of India.*

Autran, C., Phéniciens. Paris, 1920. *From the Publishers.*

Bengal District Records. Rangpur. Vol. ii, 1779–82. Calcutta, 1920. *From the Secretary of State.*

Berchem, M. van, Matériaux pour un Corpus Inscriptionum Arabicarum. 2me partie, Syrie du Sud. Jérusalem. T. 3me, 1er et 2me fasc. Caire, 1920. *From the Publishers.*

Bombay Government Records. No. DXXXI, New Series. Papers relating to the Second Revision Settlements of the Nasik Districts, with Reports on Inam Villages. 3 vols. Bombay, 1916–20. *From the Secretary of State.*

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Brown, C. J., Catalogue of Coins in the Provincial Museum, Lucknow. Coins of the Mughal Emperors. 2 vols. Oxford, 1920. *From the Publishers.*

Cordier, H., Mélanges d'histoire et de géographie orientales. T. ii. Paris, 1920. *From the Author.*

Cordier, H., Ser Marco Polo. Notes and addenda to Sir H. Yule's edition. London, 1920. *From the Publishers.*

Datta, B., The Atharvavediya Pancha-Patalika. London, 1920.

—— Lectures on the Rigveda. Lahore, 1920.
From the Author.

Davids, C. A. F. Rhys, The Visuddhi-Magga of Buddhaghosa. Pali Text Society. London, 1920. *Bought.*

Davies, N. de G. and A. H. Gardiner, The Tomb of Antefoḳer, Vizier of Sesostris I, and of his wife, Senet. Egypt Exploration Society. London, 1920.
From the Publishers.

De, S. K., History of Bengali Literature in the Nineteenth Century, 1800–25. Calcutta, 1919. *From the Publishers.*

Dodwell, H., Diary of Ananda Ranga Pillai. Vol. vii. Madras, 1919. *From the Secretary of State.*

Dougherty, R. P., Records from Erech : Time of Nabonidus (555–538 B.C.). Babylonian Texts, vol. vi. Yale Oriental Series, New Haven. London, 1920.
From the Publishers.

Edwardes, S. M., Memoir of Rao Bahadur Ranchhodlal Chhotalal. Exeter, 1920.
From Sir Evan James, K.C.I.E.

Émïn, J., Life and Adventures, 1726–1809. Edited by A. Apcar. Calcutta, 1918. *From Sir R. Temple.*

Ess, J. van, An Aid to Practical Writer's Arabic. Oxford, 1920. *From Civil Commissioner in Mesopotamia.*

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Ewbank, R. B., Indian Co-operative Studies. Edited by University of Bombay Economic Series. London and Bombay, 1920. *From the Publishers.*

Fort St. George Records. Letters, 1698. Vol. viii. Madras, 1920. *From the Secretary of State.*

Gaṇgānātha Jhā. The Nyāya-Sūṭras of Gauṭama. Translated. Vols. ii, iii, iv. Indian Thought Series. Allahabad, 1917–19. *From the Author.*

Grierson, Sir G. A., Linguistic Survey of India. Vol. viii, pt. ii. Calcutta, 1919. *From the Secretary of State.*

Gurdon, Lieut.-Col. P. R. T., The Khasis. 2nd edition. London, 1914. *From the Publishers.*

Haan, F. de, Dagh-Register gehouden int Casteel Batavia 1681. Genootschap van Kunsten en Wetenschappen. Batavia, 1919. *From the Publishers.*

Havell, E. B., Handbook of Indian Art. London, 1920. *From the Publishers.*

Hogarth, D. G., Hittite Seals with particular reference to the Ashmolean Collection. Oxford, 1920. *From the Publishers.*

Jammu and Kashmir State Archæological Department. Annual Progress Report, 1917–18. Jammu, 1919. *From the Superintendent of Archæology.*

Kane, P. V., The Kâdambarî of Bâṇabhaṭṭa. Bombay, 1920. *From the Author.*

Keay, F. E., History of Hindī Literature. Heritage of India Series. London and Calcutta, 1920. *From the Publishers.*

Kemp, S., Catalogue of Scientific Serial Publications in the Principal Libraries of Calcutta. Calcutta, 1918. *From the Asiatic Society of Bengal.*

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Konow, S., Das Indische Drama. Grundriss der Indo-Arischen Philologie und Altertumskunde, ii. Band, 2. Heft D. Berlin, 1920. *Bought.*

Kunde des Morgenlandes. Abhandlungen. Band xiii, No. 2, 3. Bergsträsser, G., Neuaramäische Märchen u. andere Texte aus Ma'Lūla. Leipzig, 1915.—Band xiii, No. 4. Schmidt, R., Vāmanabhaṭṭabāṇa's Pārvatīpariṇayanāṭakam. Leipzig, 1917.—Band xiv. Liebich, B., Candra-Vṛtti der Original - Kommentar Candragomin's zu seinem grammatischen Sūtra. Leipzig, 1918.—Band xv, No. 1. Schubring, W., Vavahāra- u. Nisiha-Sutta. Leipzig, 1919.—Band xv, No. 2. Leumann, E., Buddhistische Literatur Nordarisch u. Deutsch. Teil i: Nebenstücke. Leipzig, 1920.

From the Deutschen Morgenländischen Gesellschaft.

Lakshman Sarup, The Nighaṇṭu and the Nirukta. Critically edited from original MSS. and translated. London, 1920. *From the Publishers.*

Landberg, Comte de, Glossaire Daṭînois. Vol. i. Leide, 1920. *From the Publishers.*

Lethem, G. J., Colloquial Arabic, Shuwa Dialect of Bornu, Nigeria, and of the region of Lake Chad. London, 1920. *From the Publishers.*

Littmann, E., Zigeuner-Arabisch. Wortschatz u. Grammatik der arabischen Bestandteile in den morgenländischen Zigeunersprachen nebst einer Einleitung über das arabische Rotwälsch u. die Namen der morgenländischen Zigeuner. Bonn, 1920. *From the Publishers.*

Mahabharata, Index to the names in the. Part 10. London, 1919. *From the Secretary of State.*

Makrizi. Description historique et topographique de l'Egypte traduit par P. Casanova. Partie iv, fasc. 1. Caire, 1920.

From the Publishers.

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Mann, J., The Jews in Egypt and in Palestine under the Fāṭimid Caliphs. Vol. i. Oxford, 1920.
From the Publishers.

Mehta, S. S., Mirabai, the Saint of Mewad. Bombay, 1920.
From Mr. Jamshedji E. Saklatwalla.

Meissner, B., Babylonien u. Assyrien. Band i: Kulturgeschichtliche Bibliothek 3. Heidelberg, 1920.
From the Publishers.

Mémoirs de la Société Finno-Ougrienne. xlvii: Hämäläinen, A., Ihmisruumiin Substanssi Suomalais-Ugrilaisten Kansojen Taikuudessa. xlviii: Räsänen, M., Die Tschuwassischen Lehnwörter im Tscheremissischen. Helsinki, 1920.
From the Publishers.

Meston, Lord, India at the Crossways. Cambridge, 1920.
From the Publishers.

Mookerji, R., Local Government in Ancient India. Second edition. Oxford, 1920. *From the Publishers.*

Narayanacharya, K. and D. Raghunathaswamy Iyengar. Sankalpa-Sûryodaya of Sri Vedanta Desika. Vol. i, Acts 1–5, text and translation. Srirangam, 1917.
Bought.

Nath Law, N., Inter-State Relations in Ancient India. Part I. London, 1920. *From the Author.*

Nicholson, R. A., Secrets of the Self (Asrár-i Khudí). By Muhammad Iqbal. Translated from the original Persian. London, 1920. *From the Publishers.*

Pallis, S. A., Mandaeiske Studier. Kφbenhavn, 1919.
From the Author.

Pelliot, P., Les Grottes de Touen-Houang. Tome ii: Grottes 31 à 72. Paris, 1920. *From the Publishers.*

Pieris, P. E., The Kingdom of Jafanapatam, 1645. An account of its organisation from Portuguese archives. London, 1920.
From the Publishers.

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Rawlinson, H. G., British Beginnings in Western India, 1579–1657. Early days of the Factory of Surat. Oxford, 1920. *From the Publishers.*

Ritchie, G., The Ritchies in India. London, 1920. *From the Publishers.*

Schoff, W. H., The Ship *Tyre*: a study in the commerce of the Bible. London, 1920. *From the Author.*

Shah Munir Alam. Ma Moqiman, or Dwellers in the Lane of the Beloved. Calcutta, 1919. *From the Author.*

Stevenson, Mrs. Sinclair, Rites of the Twice-born. Religious Quest of India. London, 1920. *From the Publishers.*

Surendranath Sen, Siva Chhatrapati. Extracts and documents relating to Mārāthā History. Vol. i. Calcutta, 1920. *From the Publishers.*

Tin Maung, The Expositor (Atthasālini). Buddhaghosa's Commentary on the Dhammasaṅgaṇī, the first book of the Abhidhamma Piṭaka. Vol. i. Edited and revised by Mrs. Rhys Davids. Pali Text Society. London, 1920. *Bought.*

University College Calendar, Session 1920–1. London, 1920. *From the Provost.*

University of London, Regulations and Courses for Internal Students, Session 1920–1. Regulations for External Students, September, 1920. London, 1920. *From the Principal Officer.*

Wiedemann, A., Das alte Aegypten. Kulturgeschichtliche Bibliotek 2. Heidelberg, 1920. *From the Publishers.*

Windisch, E., Geschichte der Sanskrit-Philologie u. Indischen Altertumskunde. Grundriss der Indo-Arischen Philologie, Band I, Heft i, B, Teil ii. Berlin, 1920. *Bought.*

Woolley, C. L., Dead Towns and Living Men. London, 1920. *From the Publishers.*

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Pamphlets

Andrews, F. H., Ancient Chinese Figured Silks excavated by Sir A. Stein at ruined cities of Central Asia. From *Burlington Magazine*, July, 1920. London, 1920.
From the Secretary of State.

Caland, W., Brāhmaṇa- en Sūtra-Aanwinsten. Amsterdam, 1920. *From the Author.*

Charpentier, J., Cesare di Federici and Gasparo Balbi. Geografiska Annaler, 1920. *From the Author.*

Fischer, A., Die Vokalharmonie der Endungen an den Fremdwörtern der Türkischen. Leipzig, 1920.
From the Author.

Hornell, J., Outrigger Canoes of Madagascar and East Africa. *La Géographie*, Juin, 1920. *From the Author.*

India Office, Catalogue of the Library. Vol. i, Accessions 9. London, 1920. *From the India Office.*

Panchanan Mitra, Prehistoric Cultures and Races of India. From Calcutta University *Journal*, 1920.
From the Author.

Peserico, L., Tabularum Iguvinarum interpretatio.

—— Poëmatis Etrusci, quod Mummia dicitur interpretatio.

—— Indagini sul Poema di Gilgames. Vicenza, 1920.
From the Author.

Ramachandra Mudaliar D. B., Mudaliar. *From the Author.*

Walleser, M., Aparimitāyur-jñāna-nāma-mahāyāna-sutram. Nach einer nepalesischen Sanskrit-Handschrift mit der tibetischen u. chinesischen Version. Heidelberg, 1916.

—— Die Streitlosigkeit des Subhūti. Ein Beitrag zur buddhistischen Legendenentwicklung. Heidelberg, 1917.
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Periodicals

Al-Machriq. 18me année. Nos. 8, 9, 10, 11.

American Journal of Archæology. July–September, 1920.

American Oriental Society Journal. Vol. xl, pts. iii, iv. October, 1920.

Asiatic Review. October, 1920.

Bengal Past and Present. Vol. xviii, pts. i, ii. January–June, 1919.

Bhandarkar Institute Annals. Vol. ii, pt. i. July, 1920.

Bihar and Orissa Research Society Journal. Vol. vi, pt. ii. June, 1920.

Boston Museum of Fine Arts Bulletin. Vol. xviii, Nos. 108, 109.

Burma Research Society Journal. Vol. x, pts. i, ii, April, 1920; August, 1920.

Calcutta Review, July, 1920. No. 301.

Ceylon Antiquary and Literary Register. April, vol. v, pt. iv. July, vol. vi, pt. i.

Deutschen Morgenländischen Gesellschaft. Zeitschrift. Bd. 68, Hft. 3–4. Bd. 69, Hft. 1–2, 3–4. Bd. 70, Hft. 1–2, 3–4. Bd. 71, Hft. 1–2, 3–4. Bd. 72, Hft. 1–2, 3–4. Bd. 73, Hft. 1–2, 3–4 Bd. 74, Hft. 1, 2–3.

East and the West, The. October, 1920.

École Française d'Extrême-Orient. Bulletin. T. xix, No. 5; T. xx, No. 1.

Epigraphia Indica. Vol. xv, pts. iii, v.

Federated Malay States Museums Journal. Vol. ix, pts. i, ii.

Finno-Ougrienne Société Journal. Nos. 32, 33, 34, 37.

Geographical Journal. Vol. lvi, Nos. 2, 3, 4, 5.

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Histoire des Religions, Revue. T. lxxx, Nos. 4–5, 6. Juillet–Décembre.

Indian Antiquary. Vol. xlix, pt. 618, March, 1920. Pt. 619. April, 1920.

Indian Magazine.

Jewish Quarterly Review. Vol. xi, Nos. 1, 2.

Journal Asiatique. T. xv, No. 1, Janvier–Mars, 1920. No. 2, Avril–Juin, 1920.

Monde Oriental. Vol. xiii, fasc. 1–2.

Mythic Society Journal. October, 1920.

New China Review. Vol. ii, No. 4, August, 1920.

North China Branch R.A.S. Journal. Vol. li, 1920.

Numismatic Chronicle, 1920. Pt. ii.

Ostasiatische Zeitschrift. Jahrgang vi, Hft. iii–iv.

—— Jahrgang vii, Hft. i–ii.

—— Jahrgang viii, Hft. i–iv.

Palestine Exploration Fund. October, 1920.

Philadelphia Museum Journal. Vol. x, No. 4, December, 1919. Vol. xi, No. 1, March, 1920. No. 2, June, 1920.

Royal Society of Arts Journal.

Tijdschrift voor indische Taal-, Land- en Volkenkunde. Deel lix, afl. 4.

T'oung Pao. Décembre, 1918–19.

Tōyō-Gakuhō. Vol. x, No. 2. June, 1920.

United Empire, the Royal Colonial Institute Journal.

United Service Institution of India Journal. April, 1920.

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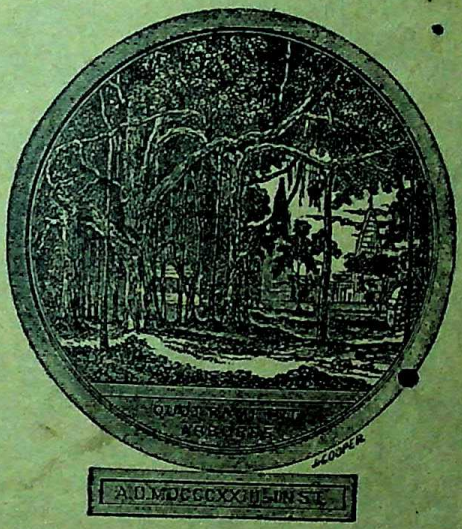

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PART III.—JULY

Gujarati Phonology

BY R. L. TURNER

INTRODUCTION

1. In India, perhaps as much as in any linguistic area, we are faced with an extensive mixture of dialects from the earliest times. The conditions have seldom been such as make for the evolution of a number of sharply differentiated languages. Constant invasions, the movements of great armies, the attraction of vast crowds of pilgrims from distant parts to centres of religious worship, the far wanderings of innumerable ascetics, the influence on illiterate peoples of travelling bards, the absence in the great plains of the north at least of pronounced natural boundaries, the continual interplay of kingdom with kingdom, a district being now in this political area now in that—these conditions have all made for widespread borrowings in language, the extension of common linguistic changes over large areas and the formation of common mixed languages, of which modern Hindōstānī, spoken and understood in varying degree over the whole of northern and central India, is an excellent example.

This state of affairs, which makes it impossible to rely upon any of the documents to give an accurate picture of the language spoken by a given people at any given period, has been excellently described by Dr. J. Bloch.[1]

[1] *La formation de la langue marathe* (quoted below as "Bloch"), pp. 1–37.

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The result has been that the sound-changes, which chiefly distinguish the modern Indo-aryan languages from the primitive as represented more or less in the Veda, were shared in common over the greater part of the area; and even the differences, such as the varying evolution of *ɣ* or of *kṣ*, have been so confused by mutual borrowings of vocabulary, early as well as late, that it is in many cases well nigh impossible to unravel their history.

2. In Gujarātī we have at least a language, the speakers of which have felt for some centuries that it is a language of their own; and it has for a considerable period been spoken over a fairly well defined area. Moreover this area has enjoyed considerable political unity.[1] Although on its northern boundaries it merges into the closely connected language of Mārwāṛī, yet on its north-eastern boundary the thinly populated Ran of Cutch divides it from great intercourse with Sindhī. Further south comes the sea. In the east from the wild speakers of the closely connected Bhīl dialects the more civilized inhabitants of Gujarat were unlikely to make extensive borrowings; and on the south a fairly sharp linguistic line divides Gujarātī from its neighbour Marāṭhī.[2]

3. The documentary evidence for its more recent history is comparatively full. An extensive poetic literature goes back to the time of Narsingh Mētā (born A.D. 1413);[3] while the texts made known to us by Dr. Tessitori[4] written in a language which he called Old Western Rājasthānī and believed by him to be the common parent of both Gujarātī and Mārwāṛī, take us to about A.D. 1300. Beyond that Hemacandra describes a literary language, Śaurasenī Apabhraṁśa, founded perhaps on a language spoken some centuries before in the Gujarātī area.[5] He also made a collection of deśī words (i.e. words not

[1] *Bombay Gazetteer*, vol. i, pt. i. [2] LSI., vol. ix, pt. iii, p. 324.
[3] *Ind. Ant.*, vol. xxiv, p. 74. The traditional text has been largely modernized.
[4] *Ind. Ant.*, vol. xliii–xlv. [5] Bloch, p. 31.

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explicable by the ordinary rules for deriving Prakrit words from Sanskrit), the majority of which undoubtedly belonged to the popular language of the district. Before that a previous stage in its evolution is reflected in the Śaurasenī Prakrit: here, however, we have to deal with a language having a long history as a literary language behind it and so full of borrowings that it scarcely can be said to be founded on any one spoken dialect.

4. Sir G. A. Grierson[1] implies that it was the invading Gūrjaras of A.D. 400–600 who were responsible for some of the characteristic peculiarities of the language as Gujarātī. For, he says, "it is an interesting fact that where they have not been absorbed into the rest of the population, as in the Plains of the Panjāb (where two districts, Gujarāt and Gujranwālā, are named after them) they are all found to speak some dialect of one and the same language, closely connected with eastern Rājasthānī and with Gujarātī. The grammar of the Gūjars of Swat is almost the same as that of the Rajputs of Jaipur."[2]

Further, the Gurjaras appear to have settled in Gujarāt in considerable numbers. Pandit Bhagwanlal Indraji writes: "That nearly a fourth of the whole Hindu population of Gujarat are Lewa and Kadwa Kanbis (Gujar tribes), and that during the sixth, seventh and eighth centuries three Gujar chiefs divided among them the sway of the entire province, explains how the province of Gujarat came to take its name from the tribe of Gujars."[3]

An examination of the Asoka inscriptions at Girnar leads to the same conclusion, that the language of the district at that time was not the direct ancestor of Gujarātī. In the two points where we can check dialectical difference observable to the present day—the treatment of *ẓ* and of *kṣ*—the language of this inscription

[1] LSI., loc. cit., p. 323. [2] Cf. also Bailey, *Himalayan Dialects*.
[3] *Bombay Gaz.*, vol. i, pt. i, p. 5.

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agrees rather with Marāṭhī than Gujarātī. *ṛ* is predominently represented by *a* (*vrachā bhati vaḍhi bhataka daḍha kata kaca maga magavyā suhadaya usaṭa vistata vyāhata* against *u* in *paripucchā vuta*); *kṣ* less certainly by *cch* (*achāti chanati chudaka saṃchāya vrachā* against *kkh* in *ithījhakhamahāmātā khamitave saṃkhitena*).[1] Gujarātī, on the other hand, shows the predominant treatment: *ṛ* > *i*, *u*; *kṣ* > *kkh*.

It may well be, therefore, that the ancestor of Marāṭhī was further to the north in those days and that it was pushed south by the speakers of the ancestor of Gujarātī. Pandit Bhagwanlal says: "As a Rāṣṭrakūṭa copperplate of A.D. 888 brings the Konkan as far north as Variav on the Tapti, the extension of the name Gujarat to Lāṭa south of the Mahi seems to have taken place under Mussalman rule."[2]

Lastly, seeing that the Gujars are supposed to have entered Gujarat from the east, by the Ratlam–Dohad route, it is interesting to note that northern Gujarātī reproduces the palatals *c*, *ch*, *j*, *jh*, by the sibilants *s* and *z*, recalling the development *ch* > *s* in Marāṭhī.

Definitions

5. Although the process of evolution in a language is continuous, it is convenient for purposes of reference to divide it into periods. In referring below to the different periods in the development of the modern Sanskritic languages of India the following terms will be used.

Indo-european (IE) denotes the period of comparative linguistic unity of the whole of our language group; Aryan the period of unity of the Persian and Indian (Sanskritic) branches.

Primitive Indian (PI) denotes the period of unity of the Aryan languages of India, when the stage of phonetic evolution had reached that generally indicated in the language of the Rigveda.

[1] Senart, vol. ii, pp. 330 and 333. [2] Op. cit., p. 5, n. 1.

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Middle Indian (MI) denotes the stage between the assimilation of consonant groups to the time of their simplification in most of the Indian languages, i.e. up to some time before A.D. 1300. The monuments of this stage are to be found in a number of what must have been popular words imported into the Rigveda, in the Pali texts, in the inscriptions of Asoka and subsequent inscriptions, in the various Prakrit and Apabhraṁśa texts, and to some extent in the changes that literary Sanskrit suffered through the influence of the spoken languages.

Modern Indian (ModI) denotes the stage reached after the simplification of double consonants, which in Gujarātī has occurred by A.D. 1300.

Old Western Rājasthānī (OWR) represents the stage of comparative linguistic unity of Gujarātī and Rājasthānī.

Where it is necessary to distinguish the Aryan languages of India from other Indian languages belonging to a different family, such as Dravidian, the term Indo-aryan will be used.

Too great stress cannot be laid on the fact that none of these stages represents a complete and absolute linguistic unity. There were differences of dialect in Indo-european, as there must later have been in Aryan. The Aryan invaders did not enter India as a single body speaking a common language, but in different groups at varying intervals, speaking different dialects (a mixture of these dialects is seen in our earliest monument, the Rigveda), but sufficiently alike to be classed under the general head of Primitive Indian. Under the term Middle Indian must, of course, be comprised a great number of different dialects, both in space and time. In the OWR texts dialectical differences of considerable extent can be seen; while even in modern Gujarātī we do not reach linguistic unity, except in so far as the literary language, arisen out of a mixture of dialects, is generally used and understood by the educated over the Gujarātī area.

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Loanwords

6. Loanwords, for the convenience of classification only (since there is no difference of principle involved), may be divided into three groups: namely loanwords A. from other contemporary spoken Indian languages; B. from the literary languages; C. from other languages.

A

7. For the reasons mentioned in the introduction there has been ever since their arrival in India mutual borrowing on an extensive scale between the different Indo-aryan languages. This is plainly mirrored in the Asoka inscriptions, where it probably is not due only to incorrect rendering of the edicts in a language other than that of the court that words displaying such mixture of different dialectical evolution are found in one and the same inscription: e.g. the appearance of PI *kṣ* both as *kkh* and as *cch*, or of PI *ṛ* as *i* and as *a*. The political conditions of this period were particularly favourable to copious borrowing and the emergence of common languages. This extension of word-forms from one dialect group to others is reflected in the literary languages: for, as is known, a very considerable number of words, from Vedic times onwards, have found their way into the literary language from the spoken languages in a more advanced stage of phonetic evolution than the main body of words comprising the literary language. Speaking generally, the earlier these dialectical words find their way into the literary languages, the greater their extension in the spoken language proves to be. Thus *daṇḍa-* (RV), *ghaṭa-* (Up.) showing the cerebral treatment of *dr* and *ṛt* in place of the dental, *kōṭha* (Pali) showing the early elimination of double consonants, are of universal extension over the Indo-aryan languages. Other examples of these dialectical and practically common Indian loanwords will be found at §§ 18, 41, 42.

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But borrowing, although doubtless more general at certain epochs when conditions are most favourable, never ceases in a country linguistically situated like India. Thus in Gujarātī we have from a language such as Marāṭhī which has initial accentuation: *aḷto* lac-dye (*alakta-*), *tirchū* crosswise (*tiraśc-*), *pālkhī* litter (*paryaṅka-*); in which *ch* > *s*: *ūs* sugar-cane (*ikṣu-*); from Hindī or some dialect where *v* > *b*: *bacvū* to escape unhurt (Pkt. *vaccaï*), *bacāv* escape, *bajvū* to be rung (*vādya-*), *bajāvvū* to ring, *bās* smell (*vāsa-*), *bichānū* bedding (*vicchādana-*), *cōbo* (*caturveda-*); from a North-western language where double consonants are preserved: *baccū* child, *macchī* fish, *macchar* mosquito; from a language where *-m-* > *-v̄-*: *gahū* wheat (*gōdhūma-*), *gosāī* ascetic (*gōsvāmin-*), *bhuī* ground, beside *bhūmī* (*bhūmi-*).

B

8. Sanskrit, from the time it became a literary language (and there are many indications even in the Rigveda that its language already was literary in the sense that it represented an older phonetic stage than the then spoken languages), provided for the spoken languages the same inexhaustible fund for borrowing learned words as literary Latin did for its own descendants, the Romance languages. Since, however, a word once become current in a language, whatever its original source, undergoes any phonetic change that affects the language as a whole, it is now impossible to distinguish literary words borrowed at a period when the difference in sound between the literary and the spoken language was still small.

Words, however, containing intervocalic stops and borrowed after the disappearance of the PI intervocalic stops are necessarily apparent. Early examples of such borrowings are to be seen in words whose ancestors in Prakrit show a double consonant beside a single one

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in Sanskrit[1] (except, of course, where the double stop represents an assimilated consonant group, e.g. *laggaï* < *lagyati* beside *lagati*). These double stops arose from the fact that at the time of their borrowing there were no single intervocalic stops in the language; and as the speaker in pronouncing a borrowed word uses, to represent its sounds, those sounds in his own language which seem to him most nearly to represent it (or, perhaps, more strictly speaking, which seem to him identical), the speakers in this case replaced the single stop (unknown in their language) of the borrowed Sanskrit word by a double stop (of which their own language then had very numerous examples). Instances of such words in Gujarātī are: *ēk* one (Pkt. *ekka-* borrowed from Skt. *ēka-* which survives in Nep. *yēuṭā* one, beside *yēk*), *jitvū* conquer (Pkt. *jitta-*, Skt. *jita-*), *lākaḍ* wooden (Pkt. *lakkuḍa-*, Skt. *lakuṭa-*, which survives in Nep. *lauro* stick, Guj. *lōḍo* penis), *thōk* collection (Pkt. *thokka-*, Skt. *stōka-*, which survives in *thōḍū* few).

It is probable that on the model of this equivalence of double stop to single stop, other words containing in Sanskrit a single continuant like *l* or *v* were borrowed with the continuant doubled. Such are H. *jōban* youth (Pkt. *jovvaṇa-*, Skt. *yauvana-*, which would normally survive in H. as **jōn*), *tēl* oil (Pkt. *tella-*, Skt. *taila-*, which would survive as **tēḷ*), *ēhvū* such (Ap. *ehavaï*, remodelled after *eha-* this, Pkt. *evva-*, Skt. *ēva*). The last two examples can be otherwise, though less probably, explained as being derived from **tailya- *aivya-*.

9. Belonging to a different and later stratum are loanwords of the type *bhagat* devotee, *ragat* blood (*bhakta- rakta-*). Here the anaptyptic insertion of the vowel (by which means the then unknown consonant group was reproduced by the speaker) brought into existence an

[1] Pischel, 890, 193, although the author gives a different explanation. Bloch, p. 105.

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intervocalic breathed stop. The tendency to voice intervocalic breathed stops, which earlier had affected all such PI stops, being still in operation, breathed intervocalic stops of such loanwords (in which alone such stops could exist) became voiced. This tendency has come to an end by the time double stops have become single (although, for example, in Nepālī it is still in operation).

The so-called tatsama (or word borrowed from Sanskrit) need not necessarily differ in form from the Sanskrit only because it was borrowed in the past and so has suffered change. It may be the result of a tadbhava (or inherited word) being partially changed after a Sanskrit model. A Gujarātī instance is *śōhvũ* look well, in which the tadbhava *sōhvũ* has been influenced by the Skt. *śōbhatē* (ts. *śōbhvũ*).

Lastly, the tatsama does not always retain its form, even at the time of borrowing, because, as pointed out above, the speakers who make it part of their language reproduce its sounds by the nearest they have in their language. Thus in Hindī Sanskrit words containing *kṣ* or initial *v-* will to-day be reproduced as tatsamas with *ch* or *b-*.

10. Probably Sanskrit was not the only literary language from which loanwords were taken. Pali, as the literary language of Buddhism, undoubtedly affected the spoken languages during the time of Buddhist ascendancy; but Pali loanwords would now be indistinguishable from Sanskrit loanwords.

The Prakrit of Jainism must have been of influence. Perhaps under this head should be put *rēṇ* night (J.Pkt. *rayaṇī*, Skt. *rajanī*), *vēṇ* word (Pkt. *vayaṇa-*, Skt. *vacana-*), which would as original tadbhavas have appeared as **rāṇ* **vāṇ*.

Finally the literary and traditional language of the bards cannot but have played some part in modifying the language of its hearers.

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C

11. That the Aryan invaders borrowed from the languages of the peoples they conquered, and that the conquered in adopting the language of their conquerors retained some of their own words is probable but as yet lacks confirmation. In this respect Dr. Bloch's indication[1] that the Indo-aryan languages, as far as concerned intervocalic consonants, went the same way as the Dravidian, is suggestive.

Later an extensive vocabulary was borrowed from Persian and Arabic under the influence of the Muhammadan rulers; a smaller from French and Portuguese traders; and of recent years a considerable number of words from English. The Persian and Arabic words, as being the oldest of this stratum, have in particular shared in the general decoloration of unstressed short vowels.

Vowel System

12. Primitive Indian possessed the following vowels and diphthongs: *a ā, i ī, u ū, ē, ō, ai, au, ṛ, ḷ*.

(*a*) In the MI stage, in the earliest monuments we have, the simple vowels remained practically unchanged; the diphthongs *ai, au* and the groups *aya, ava* became *ē, ō*, which in both cases converged with PI *ē, ō*. Long vowels before consonant groups were shortened.

ḷ, which appears but rarely in Sanskrit and then only as playing a part in the morphological system of one root, is said to become *ili* in Prakrit: *kilitta-, kilitti-* (*klpta-, klpti-*).[2] The Ap. *katta-* represents **kalpta-*, not *klpta-*. No word containing original *ḷ* survives in Gujarātī.

ṛ showed from the earliest times a variety of development as *a, i*, or *u*. Already in the prakritisms of the Rigveda it appears in the three forms, though most

[1] *Ind. Ant.*, xlviii, pp. 191–4.
[2] Pischel, § 59.

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frequently as *a*.[1] Dr. Bloch, after an examination of the Asoka inscriptions and the literary languages on this point, decides that the predominant development of *ṛ* was *a* to the south-west, *i* and *u* to the north and east.[2]

(*b*) The only other change of importance that took place in the MI period was due to the early tendency to shorten final long vowels, which in the modern languages (except Sindhī) have disappeared equally with final short vowels. Apabhraṁśa shows final long vowels becoming short, a process carried further still in Piṅgala Prakrit.[3]

(*c*) In distinction to the ancestor of Marāṭhī, the language from which Gujarātī descends developed a stress accent which played a considerable part in the further development of the MI vowel system. This accent fell on the penultimate syllable if long, on the antepenult if the penultimate were short, or on the fourth from the end if both the antepenult and the penultimate were short.[4] Its effects are scarcely visible in the Apabhraṁśa described by Hemacandra, but in OWR (A.D. 1300 onwards) it has produced considerable changes in the vowel system, e.g. *apatya- araṇyam jāmātṛ-* > Ap. *avaccaũ araṇṇaṁ* > OWR *bācaũ rāna jamāī*.

(*d*) The next important step in the development of the vowel system was due to the simplification of double consonants. The short vowel in front of the simplified group was lengthened in compensation.

(*e*) The disappearance of intervocalic stops in the MI period left a large number of vowels in contact. These maintained for the most part a separate existence till the time of the OWR texts, when the process of coalescence is seen to be beginning, e.g. :

[1] Wackernagel, §§ 9, 16, 19, 146, 172, 208.
[2] Bloch, § 30.
[3] Pischel, § 100.
[4] See below, § 15.

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Skt.	Ap.	OWR
rājā	*rāā*	*rā*
pratōlī	*paōlī*	*pōli*
pibati	*piaï*	*pīi*
divasaḥ	*diasu*	*dīsa*
bījam	*bīaṁ*	*bī*
	ghōḍaaha	*ghōḍāha*
	aṇṇaēru	*anēru*

aï and *aü* were, however, still maintained, e.g. Ap. *pavisaï karaṁtaü*, OWR *païsaï karataü*.

(*f*) In a certain number of words, however, the hiatus appears to have been avoided by the insertion of the sound *y*, the effect of which is heard to-day: *rajanī*, *vacanaṃ*, *nagarī*; OWR *rayaṇī*, *vayaṇa*, *nayarī*; G *rēṇ*, *vēṇ*, *-ner*.

Jaina Pkt. MSS. write *y* (*laghuprayatnatarayakāra*) in place of older intervocalic stops.[1] But as the great majority of such words in Gujarātī show the simple coalescence of the two vowel sounds, it is probable that those which show *y* are loanwords either from another dialect which regularly avoided hiatus in this way or from literary Jaina Prakrit. Marāṭhī shows a much greater number of words in which hiatus was avoided, usually with the sound *v*.[2]

(*g*) Finally in modern Gujarātī all final and unaccented short vowels have disappeared; and the remaining vowels in contact have coalesced: *aï* > *ē*, *aü* > *ō*. Long vowels resulting from coalescence, when unaccented, are shortened. *ī*, *ū*, when unaccented or followed by two consonants, become *i*, *u*.

(*h*) More recently *āī*, *āū* have become *ai*, *au*, e.g. *bhāī* [*bhai*], *sāhū* [*sau*].

13. Thus the Gujarātī system consists of the following vowels: *a ā*, *i ī*, *u ū*, *e ē*, *o ō*, *ɛ ɛ̄*, *ɔ ɔ̄*, *ai*, *au*, *ɔi*. Short

[1] Pischel, § 187.
Bloch, §§ 54, 55.

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vowels are slightly more open than the corresponding long vowels. *a* is [ʌ]. Dialectically, particularly in the north,[1] *ō* appears for *ā*, *e* for *i*, *o* for *u*.

Vowel-gradation

14. Even in Vedic times the PI representatives of the IE system of vowel-gradation had gained a certain analogical extension.[2] The MI sound changes considerably altered the appearance of the PI system.

PI series become			MI.
-	*a*	*ā*	*a* *ă*
i	*ē*	*ai*	*i* *ĕ*
u	*ō*	*au*	*u* *ŏ*
ṛ	*ar*	*ār*	*i* *u* *a*, *ar* or *a* + double consonant, *ār*.

The vowel-gradation, however, still remained an active element in the formation of the language, though considerably reduced in the extent of its application. Where it most generally showed itself was in the difference of gradation existing between simple and causative verbs. PI types *a* : *ā*, *u* : *ō* have been maintained to the present day, e.g. *sarvũ* move, intr., *pasarvũ* extend, intr., *marvũ* die : *sārvũ* move, tr., *pasārvũ* extend, tr., *mārvũ* kill; *dujhvũ* give milk : *dōhvũ* milk. The *a* : *ā* series has been disturbed (1) by the lengthening of PI *a* when followed by two consonants, e.g. *tāpvũ* be hot (*tapyati*) : *tāvvũ* to heat (*tāpayati*), *phāṭvũ* be split (*sphaṭyatē*) : *phāḍvũ* split (*sphāṭayati*), where the correspondence is now felt to be effected, not by change of vowel, but of consonant; (2) by the extension of the *-āpaya-* causative suffix, e.g. *karvũ* do (*karōti*) : *karāvvũ* cause to do (**kărāpayati*, Pkt. *kărāvei* replacing *kārayati*), *nāsvũ* be destroyed (*naśyati*) : *nasāḍvũ* destroy (with a still later causative suffix).

[1] LSI, loc. cit., p. 329.
[2] Wackernagel, §§ 55, 65.

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Nevertheless, the correspondence has remained an active force, *a* being felt to be the sign of the intransitive verb, *ā* of the transitive; and it has resulted in new formations of the type *paḷvū* be kept, as a passive to *pāḷvū* keep (*pālayati*) after the analogy of *sārvū* : *sarvū*, etc.

Nouns of the type *śēl* wash-stone (*śilā*, *śailya-*), *mōl* crop (*mūla-*, *maulya-*), *mōtī* pearl (*muktā*, *mauktika-*), *sōī* tailor (*sūcī*, *saucika-*), *kōḍh* leprosy (Pa. *kōṭha-* : *kuṣṭha-kauṣṭha-*), *pōthū* book (*pustaka-*), *mōth* fragrant grass (*mustā*) rest either on PI originals or were formed on the analogy of others. In the latter case the classical *vṛddhi* forms would be sanskritized MI words. *śēl* and *mōl* (with *l*, not *ḷ*) at any rate rest on forms containing *-ly-*.

The change of *ṛ* to *a*, *i*, or *u* led to a number of new analogical formations on the types *a* : *ā*, *i* : *ē*, *u* : *ō*.

a : *ā*:—

bhṛta- > *bhaṭa-* : *bhāṭa-* (*bhāḍ* a pimp's profits).

vṛta- > *vaṭa-* : *vāṭi-* (*vāḍ* hedge).

i : *ē*:—

gṛha- > Pkt. *giha-* : *gēha-*.

gṛhṇāti > Pkt. *giṇhaï* : Pkt. *geṇhaï* (perhaps *ghērvū* surround, with *ṇ* replaced by *r* due to the influence of other forms containing *r*, e.g. *gharaṇ* (*grahaṇa-*)).

√**khṛt-* (: Goth. *skildus*) > *khiṭ-* : *khēṭa-* village (*khēḍ* agriculture, through contamination with *khēt* (*kṣētra-*).

u : *ō*:—

**sphṛt-* (Germ. *spalten*) > *sphuṭyatē* (*phuṭvū* be split) : *sphōṭayati* (*phōḍvū* split).

Accent

15. Normally the stress[1] in Gujarātī falls on the penultimate syllable or on the last if that is long and is

[1] For a fuller account of the being and origin of this accent, see Turner, JRAS. April, 1916, §§ 18–43. Cf. also R. G. Bhandarkar, Commemoration Volume, art. Bloch, "A propos de l'accent d'intensité en indo-aryen," p. 359.

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derived from a long Skt. syllable (final *ā, ī, ū, e, o* derived from the contraction of two short MI vowels do not bear the accent, and, indeed, are not full long vowels), e.g. *sásro kámal kapúr vakháṇ*. In the second case, however, there is a tendency, unless the word is followed by an enclitic like *che* is, or a postposition, to give even stress, e.g. *kápúr : kapúr che*.

This accent is the descendant of the stress accent mentioned above (§ 12. *c*.), which must have arisen at some period between Vedic times and about A.D. 1300, by which time its effects are clearly visible.

It is liable to analogical displacement.

(1) In paradigms, whether of nouns or verbs, it remains always on the same syllable, e.g. *jívāmi* (after *jívasi jívati*) > OWR *jīvaũ*, G. *jívũ* live; *ghóṭakānām* (after *ghóṭakāḥ*, etc. > *ghōḍaã*, G. *ghóḍã* oblique plural). Similarly in mod. Gujarātī itself, *jíveche* after *jíve*, etc.; gen. *ghóḍāno* after nom. *ghóḍo*, etc.

(2) Since the majority of verbs would thus naturally have the accent on the initial syllable, in a certain number of compound verbs with a long middle syllable, the accent has been transferred to the initial syllable, e.g. *vinaśyati* > **vaṇāse* > *váṇase váṇse* be destroyed, similarly *upajvũ* be produced (*utpadyatē*), *vaḷagvũ* stick to (*vilagyati*), *parakhvũ* examine (*parīkṣatē*), *ōḷakhvũ* recognize (*apalakṣatē*), *ōḷãbvũ* hang (*apalamba-*), *palaṭvũ* return (*pallaṭṭaï*) opposed to *aphāḷvũ* scatter (*āsphālayati*). This change was doubtless furthered by the fact, firstly, that compound verbs of the type *ósarvũ* decrease (*apasarati*), *vísarvũ* forget (*vismarati*), *sãbharvũ* remember (*saṁsmarati*), *úcarvũ* speak (*uccarati*), etc., normally had the accent on the preposition; and secondly, that the verbs which show the shift are intransitive (compare on the other hand *aphāḷvũ*, which is transitive and retains the original accent), and so by the change of *ā* to *a* fall in with the general formative principle of transitive and intransitive verbs.

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(3) *báḷap* childhood (*bālatva-*), *káḷap* blackness (**kālatva-*) retain the accent of *bāla- kāla-*. *váṇaj* trade (*vāṇijya-*), if not a tatsama, has been affected by the accent of *váṇiyo* trader (*vāṇija-*). *áṇach* disgust (*anicchā*), *áḷakh* invisible (*alakṣya-*) have the accent of *áṇsaṇ* fasting (*anaśana-*), etc., and have also been influenced by the necessity of preserving the initial syllable for the sake of being understood.

At least one of the neighbours of Gujarātī, namely, Marāṭhī, had a different system of accentuation—a stress predominantly on the initial syllable. From some such accentuated language words of the type *áḷto* (*alakta-*), *tírchī* (*tiraśc-*), *káḍcho* ladle (HD *kaḍucchao*) must have been borrowed.

In compounds of two nouns the accent of the first has more often been retained, e.g. *Rāṭhoḍ* OWR *rāṭhaüḍa* (*rāṣṭrakūṭa-*), *Sīhot* OWR *sīhaüta* (*siṁhaputra-*), *Pháḷodhī* OWR *phalavadhī* (*phalavardhikā*), *désoṭo* OWR *desavaṭaü* (*dēśa-vṛtta-*).

Spontaneous Nasalization

16. There seems from the earliest time to have been a tendency to pronounce vowels with the velum incompletely raised, which results in the vowel becoming nasalized. In the Asoka inscriptions the variant spelling long vowel or short vowel with anusvāra may be taken to represent this tendency. In the Prakrits there are many examples, particularly of anusvāra + stop representing the assimilation of consonant groups and usually of groups containing *r* + consonant.

In Gujarātī this tendency to nasalization, though present, is less in evidence than in other MI languages. Generally speaking, only those words have this spontaneous nasalization which are so found in other languages and are attested in Prakrit, while, on the other hand, a considerable number of words are without the

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nasalization in Gujarātī which have it in some or all the other languages.

Thus with nasalization: *mājār* cat (*mārjāra-*, Pkt. *maṁjāra-*), *vākū* bent (*vakra-*, Pkt. *vaṁka-*), *ākh* eye (*akṣi-*), *pākh* wing (*pakṣa-*, Pkt. *paṁkha-*), *āsu* tear (*aśru-*, Pkt. *aṁsu-*), *ūcū* high (*ucca-*), *ūṭ* camel (*uṣṭra-*), *chāḍvū* abandon (*chardayati*). The last is nasalized only in Marāṭhī and Gujarātī.

Without nasalization: *māgvū* ask for (*mārgati*), *mājvū* clean (*mārjati*), *sāp* snake (*sarpa-*), *kākḍī* cucumber (*karkaṭikā*), *sācū* true (*satya-*), *ōṭh* lip (*ōṣṭha-*), *ūbhū* upright (*ūrdhva-*).

Similarly the spontaneous nasalization of simple long vowels is found less frequently in Gujarātī, e.g. *bhẽs* buffalo cow (*mahiṣī*), *bāhyū* arm (*bāhu-*). The question, primarily in regard to Marāṭhī, is discussed at length by Dr. Bloch.[1]

Vowels in Accented Syllables

17. In open syllables, except for PI *ai*, *au*, *ɣ*, all vowels remain unchanged. *ai*, *au* became *ē*, *ō*, which converged with PI *ē*, *ō*.

a

khaṇ moment (*kṣaṇa-*), *gaḷū* throat (*gala-*), *kamaḷ* lotus (*kamala-*), *karvū* do (*karōti*), *sasro* father-in-law (*śvaśura-*), *dahĩ* curds (*dadhi-*), *sahiyar* female friend (*sakhī*), *jaḷvū* burn, intr. (*jvalati*), *jaṇvū* bear young (*janayati*), *saso* hare (*śaśa-*).

In the OWR words in which Dr. Tessitori[2] gives *i* or *u* from *a*, Gujarātī shows *a*. Most of the OWR examples of this change can be explained by special conditions. *tijaï*, *dhina*, *kṣitri* are tatsamas (*tyaj-*, *dhanya-*, *kṣatriya-*); *khiṇa* is probably due to the influence of **kṣiṇa* ts. from *kṣaṇa-*; *giu* < *gaïu*, perhaps due to quick pronunciation

[1] Bloch, § 66 ff.

[2] *Ind. Ant.*, xliii, p. 55.

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(cf. H. [gia˙] = *gayā*); *jiniu* < *janiu*, due to the following *i*. Only for *iṇḍaü* (*aṇḍa-*) and *giṇaï* (*gaṇayati*) does there seem to be no explanation. The vocalization of *giṇaï*, however, appears also in H. *ginnā* (beside G. *gaṇvũ*, N. *gannu*); and Dr. Tessitori remarks that Marwāṛī retains this OWR *i* < *a*. The occurrence of *i* beside *a* may then be due to dialect mixture. Similarly *u* < *a* in the presence of a labial. Gujarātī uniformly shows *a*.

ā

mājār (*mārjāra-*), *nām* name (*nāman-*), *jāṇvũ* know (*jānāti*), *nās* loss (*nāśa-*), *vakhāṇ* praise (*vyākhyāna-*), *bhāī* (*bhrāṭr-*), *tāvvũ* (*tāpayati*), *vāḷũ* sand (*vālukā*), *pasāī* riches (*prasāda-*).

In a few verbs we have Gujarātī *a* for *ā* (= Skt. *ā*, or *a* before consonant group) in the accented syllable. These are mostly transitive verbs, and have been reformed with *a* for *ā* after the type *sarvũ* (*sarati*): *sārvũ* (*sārayati*); e.g. *dhakhvũ* be angry (*dhakṣati*), *dhasvũ* push through, intr. (*dharṣati*), *ghasvũ* rub against (*gharṣati*) has perhaps been influenced by the passive *ghasāvũ*. This replacement of *ā* by *a* in intransitive verbs is very common in Marāṭhī.[1]

Dr. Tessitori[2] quotes OWR words as showing *a* < *ā*: *bimaṇaũ* (**dvi-mānaka-*), *vīnavaï* (*vijñāpayati*), *saĩ* (*śatāni*); *bimaṇaũ* as the name of a measure is suspect of borrowing; *vīnavaï* represents Skt. *vijñapayati*, and *saĩ* for *saāĩ* is due to sing. *saũ* (*śatam*).

i

śir head (*śiras-*), *chiṇvũ* slit (*chinatti*), *viṇvũ* select (*vinayati*), *cir* for long (*cira-*), *ciṇvũ* fold (*cinōti*), *ṭiḷo* caste-mark (*tilaka-*), *vimaḷ* clean (*vimala-*), *viṇ* without (*vinā*), *pisvũ* grind (*pinaṣṭi*, *piṁṣati*).

[1] Turner, JRAS., April, 1916, p. 238.
[2] *Ind. Ant.*, xliii, p. 5.

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lakhvũ for ts. **likhvũ* (*likhati*) is perhaps due to the influence of forms where the first syllable is unaccented : *lakhāvvũ*.

ī

bī seed (*bīja-*), *hīṇ* wicked (*hīna-*), *śīḷ* nature (*śīla-*), *khīr* rice boiled in milk (*kṣīra-*), *dīvo* lamp (*dīpa-*), *kīḍo* insect (*kīṭa-*), *ahīr* herdsman (*ābhīra-*), *nīḷũ* blue (*nīla-*), *pīḍvũ* hurt (*pīḍayati*), *jīrũ* cummin-seed (*jīra-*), *śīm* boundary (*sīmā*).

u

kuḷ family (*kula-*), *dhuṇvũ* shake, intr. (*dhunōti*), *ur* breast (*uras-*), *khur* hoof (*khura-*), *musḷũ* pestle (*musala-*), *puḍī* bundle (*puṭikā*), *suvvũ* sleep (**supati*, Pkt. *suvaï*).

ū

dhūḷ dust (*dhūli-*), *mūḷ* root (*mūla-*), *jū* louse (*yūkā*), *ūṇũ* not quite full (*ūna-*), *ūs* salt (*ūṣa-*), *kapūr* camphor (*karpūra-*), *majūs* box (*majjūṣā*), *sūrũ* brave (*śūra-*), *rūḍũ* proper (*rūpa-*), *jūvũ* gambling (*dyūta-*).

ē

= PI *ē* : *mēh* rain (*mēgha-*), *nēh* love (*snēha-*), *mēḷvũ* mix (*mēlayati*), *tēṇe* by him, OWR *teṇaĩ* (*tēna*), *chēḍo* end (*chēda-*), *dēś* country (*dēśa-*), *bhēv* secret (*bhēda-*).

= PI *ai* : *gēru* red chalk (*gairika-*), *kēśuḍã* saffron flowers (*kaiṁśuka-*).

ī i < *ē* in *phīṇ* foam, beside *phēṇ* (*phēna-*), *dier* husband's younger brother (*dēvara-*), is unexplained.

ō

= PI *ō* : *bōḷvũ* sink (*bōlayati*), *rōvũ* weep (*rōdati*), *sōs* thirst (*śōṣa-*), *dōhvũ* (*dōhayati*), *ghō* iguana (*gōdhā*), *lōhī* blood (*lōhita-*), *gōras* whey, *gōrśī* pot to contain whey (*gōrasa-*), *mōhvũ* enchant (*mōhayati*), *kōs* 1½ miles (*krōśa-*), *gōḷ* round (*gōla-*), *ghōḍo* horse (*ghōṭaka-*), *chōḍvũ* let go (*chōṭayati*), *thōḍũ* (*stōka-*), *dōr* rope (*dōraka-*).

= PI *au* : *gōrũ* fair (*gaura-*), *dhōvũ* wash (*dhauti*),

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kōḷī Śūdra caste (*kaulika-*), *pōḷī* wheaten cake (*pauli-*), *cōr* thief (*caura-*), *ōsaḍ* drug (*auṣadha-*). Cf. also the words given in § 14.

ṛ

18. The development of the PI vowel *ṛ* is confused from the time of our earliest documents.[1] In Middle Indian it appears as *a*, *i*, or *u*. According to Dr. Bloch the repartition was probably this: in the south-west *ṛ* > *a*; in the north and north-east *ṛ* > *i*, or *u* in the presence of a labial. Since the earliest times, however, there has been constant mutual borrowing, and all the modern languages present examples of all three developments in their vocabulary. But in maintaining that Gujarātī belongs in this respect to the south-west group Dr. Bloch is perhaps wrong. The language of the Asoka inscriptions at Girnar, which show the *a* treatment predominating,[2] cannot be held to support his view, for, as shown above (§ 4), it probably does not represent the ancestor of Gujarātī.

On the contrary, the predominant treatment in Gujarātī (as undoubtedly in Śaurasēnī Prakrit) is *ṛ* > *i*, *u*, e.g. *vīchī* scorpion (*vṛścika-*): the N.W. dialects, from which presumably M. *vīcū* is borrowed, show *-u* in the termination corresponding to Pkt. *viṁchua-*, which points to the Gujarātī word not being borrowed at least from a N.W. dialect; *kīdhū* done (*kṛta-*) with *-dh-* after *lādh-* (*labdha-*) etc., *mahīrū* mother's house (**mātṛgarhakam* > **māiharaũ*) not found in the N.W. dialects; *dīṭhū* seen (*dṛṣṭa-*); *vuṭhvū* to rain (*vṛṣṭa-*); *haiyū*, *haiḍū* memory, OWR *haīḍaũ* (*hṛdaya-*) represents older *haïa-ḍa-* by metathesis of *a* and *i* in Ap. *hiaa-*.

Several words which show the *a* treatment are used in a special sense, while the cognates with *i*, *u* retain their more general and original meaning. This points to the

[1] Bloch, §§ 13, 31, and literature there quoted.

[2] Senart, ii, p. 330.

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first class rather than the second having been borrowed, e.g. *maḍḍū* corpse (*mr̥ta-*), but *muo* dead (*muḍḍū* corpse is the result of contamination); *pāṭhū* tumour on the back (*pr̥ṣṭha-*), but *pūṭh* back.

In a number of other words the position of the vowel in an unaccented syllable precludes us from deciding whether the treatment was *i* or *a*, e.g. *nivaḍvū* (*vr̥ta-*), *dēvaḍ* (*vr̥ti-*), *vaḍe*, prep. (*vr̥ta-*). Lastly, in a number of verbs *a* may represent not *r̥* but *ar*. This is borne out by the fact that the N.W. languages also show *a* here, e.g. *dhasvū* (*dharṣati*), but *dhīṭ* impudent (*dhr̥ṣṭa-*). In *mau* soft (*mr̥du-*), *pōhḷū* broad (*pr̥thula-*) there is common Indian dissimilation of *u* between two labials to *a*.

Initially *r̥* appears as *ri*. *a*, *i*, *u* < *r̥* converge with PI *a*, *i*, *u*.

ri- : *rijhvū* be pleased (*r̥dhyati*), *pārdhī* hunter (**pāpa-riddhi-* : *pāpa-rddhi-*), loan word *rĩch* bear (*r̥kṣa-*).

i : *vīchī* (*vr̥ścika-*), *dīṭhū* (*dr̥ṣṭa-*), *diśvū* appear (*dr̥śyatē*), *mahīrū* (**mātr̥garhakam*), *śiyāḷ* jackal (*śr̥gāla-*), *bhīgāro* wasp (*bhr̥ṅga-*), *mīṭhū* sweet (*mr̥ṣṭa-*), *śĩg* horn (*śr̥ṅga-*), *gīdh* vulture (*gr̥dhra-*), *haiḍū* (*hr̥daya-*), *ghī* (*ghr̥ta-*).

u : *vuṭhvū* (*vr̥ṣṭa-*), *muo* (*mr̥ta-*), *pūṭh* (*pr̥ṣṭha-*), *bhujvū* roast (*bhr̥jjati*), *bhūṭhū* parched (*bhr̥ṣṭa-*), *gūthvū* plait (*grathnāti*), *ghūṭvū* rub (*ghr̥ṣṭa-*), *puchvū* ask (*pr̥cchati*), *suṇvū* hear (*śr̥ṇōti*), *mɔsāḷ* mother's house (*mātr̥-śālā*).

a : *mau* (*mr̥du-*), *pōhḷū* (*pr̥thula-*), *māṭī* earth (*mr̥tti-*), *taṇkhalū* a straw (*tr̥ṇa-*), *maḍḍū* (*mr̥ta-*), *pāṭhū* (*pr̥ṣṭha-*).

Vowels in Closed Syllables

19. In the MI stage all long vowels before two consonants were shortened. These short vowels converge with the corresponding PI short vowels. Later, in the period preceding the OWR texts, when the double consonant was shortened, or in the case of the group

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nasal + consonant when the nasality was produced simultaneously with the vowel, the preceding short vowel, if in the syllable bearing the chief stress, was lengthened.

MI *a*

< *a* : *kām* work (*karmaṇ-*), *āj* to-day (*adya*), *sācũ* (*satya-*), *kān* ear (*karṇa-*), *mākhaṇ* butter (*mrakṣaṇa-*), *hāth* hand (*hasta-*), *vãjh* barren (*vandhyā*), *rãḍ* widow (*raṇḍā*), *sãjh* evening (*sandhyā*), *cāk* wheel (*cakra-*), *vān* colour (*varṇa-*).

< *ā* : *rānī* queen (*rājñī*), *māgvũ* (*mārgatī*), *mājvũ* (*mārjati*), *āp* you (*ātmā*).

< *r̥* : *māṭī* (*mr̥tti-*), *pāṭhũ* (*pr̥ṣṭha-*).

MI *i*

< *i* : *pīṭh* flour (*piṣṭa-*), *cīl* kite (*cilla-*), *śīkh* advice (*śikṣā*), *śīdhũ* upright (*siddha-*), *śīkũ* sling (*śikya-*), *vīj* lightning (*vidyut-*).

< *ī* : *śīś* head (*śīrṣa-*), *jīnũ* thin (*jīrṇa-*), *tīṇũ tīkhũ* sharp (*tīkṣṇa-*).

< *r̥* : *mīṭhũ* (*mr̥ṣṭa-*), *dīṭhũ* (*dr̥ṣṭa-*), *dhīṭ* (*dhr̥ṣṭa-*), *śĩg* (*śr̥ṅga-*).

MI *u*

< *u* : *būdh* wise (*buddha-*), *phūl* flower (*phulla-*), *dūdh* milk (*dugdha-*), *sūkhũ* dry (*śuṣka-*), *pūt* son (*putra-*), *sūdh* sense (*śuddhi-*), *ũbī* ear of corn (*umbikā*), *pūn* charity (*puṇya-*), *mūṭhī* handful (*muṣṭi-*).

< *ū* : *ūn* wool (*ūrṇa-*), *ūbhũ* (*ūrdhva-*), *sūnũ* empty (*śūnya-*), *kūco* brush (*kūrca-*).

< *r̥* : *pūṭh* (*pr̥ṣṭha-*), *bhūṭhũ* (*bhr̥ṣṭa-*).

MI *e*

< *ē* : *khēt* (*kṣētra-*), *jēṭh* elder (*jyēṣṭha-*), *pēkhvũ* see (*prēkṣatē*), *śēṭh* merchant (*śrēṣṭhin-*).

< *ai* : *śēl* (*śailya-*), *tēl* (**tailya-* : *taila-*).

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MI *o*

< *ō* : *gōt* family (*gōtra-*), *kōṭhī* factory (*kōṣṭha-*), *gōṭho* cowpen (*gōṣṭha-*), *jōdh* strong (*yōddhṛ-*), *rōpvū* plant (*rōpyatē*), *põkhvū* sprinkle the bride (*prōkṣatē*), *jōg* fit (*yōgya-*), *cōkhū* clean (*cōkṣa-*).

< *au* : *mōtī* (*mauktika-*), *pōthū* (*paustaka-*).

Development of OG. *ī*, *ū*

20. Stressed *ī*, *ū* (from MI *ī*, *ū* or *i*, *u* before consonant group) are shortened when followed (1) by two Gujarātī consonants, between which a MI short vowel has been dropped; or (2) by two or more unstressed syllables. In the first case the shortening probably occurred before the dropping of the syllable following; but it is impossible to date the change, because the written language does not show whether the syllable has dropped or not, while the language of poetry retains the syllables long after they have been dropped in ordinary speech.

ī

(1) *jivtū* alive (*jīvati*), *ichvū* wish (*icchati*), *cibhḍī* (*cirbhaṭikā*), *pipḷo* ficus (*pippala-*), *diśvū* (*dṛśyatē*), *dhikvū* (*dhikṣatē*), *pījvū* card cotton (*piñjā*), *khijvū* be vexed (*khidyatē*), *khilḍo* peg, *vijḷī* lightning, *khicḍī* rice and pulse, opposed to *dīṭhū*, *mīṭhū*, *śīdhū*, etc., *khīj* annoyance, *khīlo* peg, *vīj*, *khīc* jowar flour, etc.

ū

cusvū suck (*cūṣati*), *ujḷū* bright (*ujjvala-*), *kukḍī* hen (*kukkuṭī*), *kuṭṇī* whore (*kuṭṭinī*), *puchḍī* tail (*puccha-*), *tuṭvū* be broken (*truṭyati*), *uḍvū* fly (*uḍḍayatē*), *ugvū* grow (*udgata-*), *kuṭvū* beat (*kuṭṭayati*), opposed to *sūkhū*, *mūṭhī*, *ūbhū*, *sūnū*, *bhūṭhū*, *dūdh*, *bhūkh* hunger (*bubhukṣā*), *phūl*, *pūṭh*, etc.

(2) *upaṇvū* winnow (*utpunāti*), *ughaḍvū* be fine (*udghaṭ-*), *ugmaṇū* east (*udgamana-*).

In the verbal paradigm the number of dissyllabic forms

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with an open syllable is very small. The present tense is rendered trisyllabic by the addition of *chũ*, etc. (e.g. *cũsũchũ* > *cusũchũ*, etc.), while in all tenses from the past and present participles the first syllable is closed (e.g. *custo*, *cusyo*). The tendency is therefore to generalize the short vowel throughout the whole verb, and to preserve the long only in isolated forms like *dīṭhũ : diśvũ*, *bhūṭhũ : bhujvũ* ; but even here the short vowel has sometimes triumphed, e.g. *sutũ* (*supta-*) after *suvvũ*.

Even in dissyllabic words with open *ī ū* the vowel is shorter than in corresponding monosyllables ; and this shortening is sometimes marked in writing : e.g. *cuḍo* or *cūḍo*, *durũ* or *dūrũ*, *junũ* or *jūnũ*, *kukar* or *kūkar*, etc.

In a few words, even where *i* and *u* are to be expected, the influence of the long *ī*, *ū* of the cognate Sanskrit word has sufficed to generalize the long vowel at least in the literary language, e.g. *dīpvũ*, *jīvvũ*, *cīrvũ*.

The monosyllables *dūdh*, *jūt*, though often written with *u*, I have always heard with *ū*.

Vowels with the Secondary Accent

21. When carrying the secondary stress of the word, short vowels remain unaltered, long vowels are shortened, and consonant groups are simplified without compensatory lengthening of the preceding short vowel.

a : parjāḷvũ flame (*parijvālayati*), *paraṇvũ* marry (*pariṇayati*), *parsēv* sweat (**pariṣvēda-*).

u : ujḷāī brightness (*ujjvala-*).

ā : cakvā ruddy-goose (*cakravāka-*), *pakhvāj* side-drum (*pakṣa-vādya-*), *kaṭhiyāro* woodcutter (*kāṣṭhika-kāra-*), *agiyārī* fire-temple (*agni-āgāra-*).

ī : kiḍiyārũ ant-hole (*kīṭaka-*).

ū : kukvā stammering (**kukka-vāda-*).

ō : koṭhār granary (*kōṣṭhāgāra-*).

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Unaccented Vowels

22. All MI short unaccented vowels, unless protected by two following consonants, either become *a* or disappear altogether. Long vowels preserve their quality, but are shortened.

The weakest positions are: (1) the absolute beginning of the word; (2) between the main and the secondary stress or vice versa. In both of these, short vowels disappear altogether. The next weakest positions are: (1) the initial syllable preceding the main stress; (2) the syllable following the main stress in an originally trisyllabic word. In both these short vowels lose their timbre and long vowels their length.

Preaccentual Vowels

23. (1) Initial *a*, *u* are lost.

a: rān desert (*araṇya-*), *rīṭhī* soapnut tree (*ariṣṭha-*), *lāī* firebrand (*alāta-*), *jhājhū* more, OWR *jhājhaũ* (**adhyadhyaka-*), *jhākh* glance (*adhyakṣa-*).

u: vākhro furniture (*upaskara-*), *vāyṇu* marriage-feast (*upāyana-*).

bēsvū sit, *bēṭhū* having sat, OWR *baïsaï*, *'baïṭhaũ* (*upaviśati*, *upaviṣṭa-*) must be considered loanwords on account of their *b-* < *-v-* in face of *vākhro*.

The preaccentual vowel before two consonants remains in *uchāḷvū*, *ughāḍvū*, *ugāmvu* (*ucchālayati*, *udghāṭita-*, *udgāmayati*) through the influence of *úchaḷvū*, *úghaḍvū*, *úcarvū*, etc.

(2) Except when absolutely initial, *a*, *i*, *u* appear as *a*.

a: pavāḍo slander (*pravāda-*), *jaḷō* leech (*jalaukā*), *kahāṇī* story (*kathānaka-*), *vahālū* beloved < **vabhallaka-* (*vallabha-*), *karāḷ* dreadful (*karāla-*).

i: vahāṇū dawn (**vibhāna-*, HD *vihāṇaṁ*), *caṇōṭhī* berry (HD *ciṇōṭhī*), *vaṇasvū* be destroyed (*vinaśyati*), *vaḷagvū* (*vilagyati*), *varvū* ugly (*virūpa-*), *vasmū* uneven (*viṣáma-* after *sáma-* ?).

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u: *Davē* (**duvēda-*), *dharāḷ* (*dhurālu-*), *sahelū* easy (HD *suhellī*).

āv < *um* remains: *kāvāro* unmarried (*kumāra-*).

i and *u* remain (*a*) when immediately followed by a MI vowel: *viāvū* bear (*vijāyatē*); (*b*) when followed by two consonants, *citāro* painter (*citrakāra-*), *nisāso* sigh (*niḥśvāsa-*), *dubhāvo* pain (*durbhāva-*), see § 23 (3): *vachoḍvū* to wean (**vicchoṭayati*) after the analogy of *vaḷagvū*, *vaṇasvū*, etc.

In *visarvū nivaḍvū i* represents accented *í* (*vísmarati nírvṛta-*); *vilāḍī* cat (*viḍālī*), *kuhāḍo* axe (*kuṭhāra-*) are perhaps loanwords.

(3) Preaccentual Old Gujarātī *ā*, *ī*, *ū*, *ē*, *ō*, whatever their origin, are shortened.

ā: *avās* abode (*āvāsa-*), *avāī* report (*āvādā-*), *ahīr* (*ābhīra-*), *camār* of the shoemaker caste (*carmakāra-*), *kapūr* (*karpūra-*), *naṭhāro* wicked (**naṣṭa-kāra-*), *mājār* (*mārjāra-*), *vakhāṇ* (*vyākhyāna-*), *kapās* cotton (*kārpāsa-*), *pakhālvū* wash (*prakṣālayati*), *paṭhāvvū* send (*prasthāpayati*), *janōī* sacred thread (*yajñōpavīta-*).

kadhān spoilt corn (*kā* + *dhān*), *kapūt* bad son, *kaṭhām* privy parts (*kā-*), *lagāḍvū* set to (: *lāgvū*), *dhavāḍvū* cause to run (: *dhāvvū*), *nhavāḍvū* wash (: *nhāvū*), and so in all causatives in *-āvvū*, *-āḍvū*.

ī: *śiyāḷo* cold weather (*śītakāla-*), *divēl* lamp oil (**dīpatailya-*), *bhikhārī* beggar (*bhikṣā-kara*), *nisāso* (*nihśvāsā-*), *citāro* (*citrakāra-*), *pījāro* cotton-carder (**piñjā-kara-*), *śikhāvvū* teach (**śikṣāpayati*).

ū: *jugār* gambling (*dyūta-udgāra-*), *sut(h)ār* carpenter (*sūtradhāra-*), *cunāro* lime-burner (*cūrṇakāra-*), *dhutāro* cheat (*dhūrta-*), *uchāḷvū* toss up (*ucchālayati*), *ughāḍvū* (*udghāṭayati*), *ugāmvū* (*udgāmayati*), *ubhā* grains of uncooked rice (*udbhāta-*), *dubhāvo* (*durbhāva-*).

ē: *śevāḷ* moss (*śēvāla-*), *jeṭhānī* husband's elder brother's wife (: *jēṭh*), *peṭāro* box (: *pēṭ*), *vehvāī* bride and bridegroom's fathers in relation to each other (*vaivāhika-*).

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-ō: govāḷ herdsman (*gōpāla-*), *ghoḍār* stable (*ghōṭa-agāra-*), *sohāg* good fortune (*saubhāgya-*).

Postaccentual Vowels

24. In the postaccentual position only short vowels can come under consideration, except where, for analogical or other reasons, there has occurred a shift of accent. Excluding the final syllable which will be dealt with separately, there are three postaccentual positions represented by three types: ´ ◡ ≍, ´ ◡ ◡ ≍, ≍ ◡ ´ ≍. In the first the syllable remains, but the vowel loses it timbre, appearing always as *a*; in the other two positions the vowel is lost altogether (except as specified below, § 38). The decoloration of the unaccented short vowel has been carried through in OWR.

(1) Type ´ ◡ ≍.

a : *kamaḷ* (*kamala-*), *pāthar* stone (*prastara-*), *kājaḷ* lampblack (*kajjala-*), *mājar* clump of blossoms (*mañjara-*), *gāgar* pot (*gargarī*), *thāvar* fixed (*sthāvara-*), *kākaṇ* bracelet (*kaṅkana-*); *pākhar* armour for elephants (*prakṣara-*), *pāpaḍ* a cake (*parpaṭa-*), *jhālar* curl (*jhallarī*).

i : *vēraṇ* revengeful (*vairiṇī*), *haraṇ* doe (*hariṇī*), *māgsar* (*mārgaśira-*), *tītar* partridge (*tittira-*), *kaṇas* ear of corn (*kaniśa-*), *parakhvū* examine < **párikh-* (*parīkṣatē*), *vaṇ* without = *viṇ* (*vinā*).[1]

u : *mākaṇ* bug (*matkuna-*), *phāgaṇ* (*phālguna-*), *māṇas* (*mānuṣa-*), *gūgaḷ* a gum (*gulgulu-*), *lasaṇ* garlic (*laśuna-*), *ãgaḷ* finger's breadth (*aṅguli-*), *ũdar* mouse (*undura-*), *lākaḍ* (HD *lakkuḍa-*).

The change of *u* to *a* in *paṇ* but (if this is connected with *punar*) is already found in Pali *pana*.

(2) Type ´ ◡ ◡ ≍.

a : *āglī* bolt (*argalikā*), *pãcmū* fifth (**pañcamaka-*), *kākḍī* (*karkaṭikā*), *ãgṇū* courtyard (*aṅgana-*), *kābrū* spotted (*karbara-*), *jājro* carrot (*jarjara*), *dubḷū* thin

[1] For change of accent see above, § 15.

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(*durbala-*), *ājṇī* sty in the eye < **añjanikā* (*añjana-*), *musḷū* (*musala-*).

i : *gābhṇī* pregnant (**garbhiṇikā*), *gharṇī* house-wife (**garhiṇikā*), *paḍōs* neighbour (*prativasa-*), *kuṭṇī* (*kuṭṭiṇī*); MI *i* in *tatsamas* : *pharsū* astringent (*spariśa-* : *sparśa-*), *kārmū* strange (HD *kārima-*), *ujāgrū* wakeful (HD *ujjāgira-*).

u : *sasro* (**śvaśuraka-*), *ãgḷī* finger (*aṅguli-*), *tãḍḷā* rice grains (*taṇḍula-*), *kukḍī* (*kukkuṭī-*), *cōgṇū* fourfold (*caturguṇa-*), *pãgḷū* lame (*paṅgala-*), *pãsrū* erect (**prāṁśuraka-* : *prāṁśu-*), *hīgḷū* vermilion (*hiṅgula-*), *kaḍcho* (HD *kaḍucchao*).

(3) Type ⏑ – ⏑ –.

a : *cakvā kukvā pakhvāj* (see § 21).

i : *parjāḷvū parsēv* (see § 21).

Final Vowels

25. PI *-aḥ, -iḥ, -uḥ* appear in MI as *-ō, -ī, -ū*. Other final vowels remained unchanged. Consonant, however, with the fact that final vowels are relatively shorter than the corresponding vowels of internal syllables, there are three main stages to distinguish in their further development.

(1) *-ō, -ē* became *-u, -i*; other long vowels *-ā, -ī, -ū* were shortened. The shortening of final *-ā* is already found in the Asoka inscriptions, e.g. at Girnar *rāja tada tatha yatha*.[1]

(2) In OWR all final vowels (following a MI consonant) are in process of disappearing. Whether they have disappeared altogether or having lost their timbre have simply become *-a*, it is impossible for reasons explained above to say.

(3) In Mod. Gujarātī all final vowels have disappeared, e.g. Skt. *hastaḥ*, Pkt. *hatthō*, Ap. *hatthu*, OWR *hāthu hātha*, G. *hāth*.

[1] Senart, ii, p. 329.

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In considering the history of final vowels, distinction must be made between those immediately following a MI consonant, as in *hattho* and those following a MI vowel (owing to the disappearance of a PI consonant), as in Pkt. *ghōḍaō* (*ghōṭakaḥ*), where the final vowel survived into the OWR period and afterwards coalesced with the preceding vowel, e.g. OWR *ghōḍaü*, G. *ghōḍo*. This latter class will be described below in § 26.

Before *-m*, which became MI *-ṁ* (? nasalized labial spirant), PI long vowels were shortened in MI, e.g. *jihvām* > *jibbhaṁ*. This shortening was probably a sandhi effect, occurring at first in word groups where, owing to the following word beginning with a consonant, the vowel was followed by two or more consonants. Next the nasal consonant was lost, and the nasality transferred to the vowel, The labial position of *-ṁ*, however, was reflected in the history of *-aṁ*. Following a MI consonant *-aṁ* appeared as *-u*,[1] as in Apabhraṁśa, and is lost in Gujarātī; after a MI vowel it retained its nasality as *-aũ* (OWR *-aũ*, G *-ũ*).

-a: voc. sing. *pūt* < *putra*, etc.

-i: *ākh* eye < *akṣi*.

-u: *vīj* < Pa. *vijju*, Skt. *vidyut*.

-ā: *khāṭ* bed (*khaṭvā*), *jībh* tongue (*jihvā*), *sān* sign (*saṁjñā*), *vāṇh* (*vandhyā*), *rāḍ* (*raṇḍā*), etc.

-ī: = PI *ī:* *dhamaṇ* bellows (*dhamanī*), *cōth* 4th day (*caturthī*), etc.

= PI *-iḥ:* *āg* fire (*agniḥ*), *ãc* blaze (*arciḥ*), etc.

-ō: *hāth* < *hastaḥ*, *dāt* tooth < *dantaḥ*, etc.

-am = PI *-am:* acc. sing. masc. *hāth* < *hastam*, etc., *dūdh* < *dugdham*, *kāl* < *kalyam*.

= PI *-ām:* acc. sing. fem. *jībh* < *jihvām*, etc.

-im: acc. sing., masc. or fem. *āg* < *agnim*, etc.

[1] Pischel, § 351–2.

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Vowels in Contact

26. The disappearance of PI intervocalic stops left a large number of MI vowels in contact. For the most part these maintained a separate existence into the Apabhraṁśa period, and it is only in OWR that we first see them generally coalescing.

The process of avoiding hiatus by contracting two separate vowels into one syllable depends for its carrying through largely on speech tempo. There was thus a long period during which words were used sometimes in their contracted, sometimes in their uncontracted, forms. This condition is shown to some extent in the literary Prakrits, influenced no doubt by the surrounding spoken languages. Pischel gives numerous examples of such contractions.[1] In some cases the contraction was undoubtedly early and general. As instances in Gujarātī there are *mōr* peacock (*mayūra-*); *mōra-* is attested in Pa.; *maūra-*, which is found in Prakrit beside *mōra-*, *mōlē*, *mōraya-*, is a Sanskritized form. That G *mōr* rests on MI *mōra-*, not *maūra-*, is shown by its having *ō*, not *ō̃*. In Middle and Modern Indian, *-y-* is a most unstable element and was the first of the intervocalic consonants to disappear. The close *ē* and *ō* of *kēḷ* plaintain (*kadalī*), *bōr* jujube-tree (*badara-*) presuppose their derivation from MI *kēlī* and *bōra-* which are attested in Prakrit (< **kadilī*, **badurō* ?).

In OWR the following vowels have already coalesced: (1) vowels of a similar nature: *ẵ* + *ẵ*, *ĭ̃* + *ĭ̃*, *ŭ̃* + *ŭ̃*: e.g. *uṇhālaü* < *uṇhaālaü* (*uṣṇakāla-*), *rā* < *rāā* (*rājā*). (2) *a* + *ē* > *ē*, *a* + *ō* > *ō*: e.g. *anēru* < Ap. *aṇṇaēru* (**anyakārya-*), *pōli* < *paōli* (*pratōlī*). (3) *i* + *a*, *i* + *u* > *ī*, *ŭ̃* + *a* > *ū̃*: e.g. *dīvī* < **dīvia* (*dīpikā*), *dīsa* (*divasa-*), *pīi* < *piaï* (*pibati*); *amī* < **amiũ* (*amr̥ta-*), *jamāī* < *jāmāiu* (*jāmātr̥ka-*); *cūu* < *cuaü* (*cyuta-*), *mūu* < *muaü* (*mr̥ta-*); *jū* < *jūa* (*yūkā*), *rūḍaü* < *rūaḍaü* (*rūpa-*).

[1] Pischel, §§ 166–7.

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The remaining vowels in contact *a* + *i*, *a* + *u* are still held apart. In Gujarātī these two coalesce and form *ē* and *ō* respectively.

In the accented syllable in Gujarātī the long vowels resulting from crasis maintain their length; in the unaccented (preaccentual and postaccentual) syllables they are shortened, and in the postaccentual syllables they become more close. Mr. N. B. Divatia[1] claims that they are distinguishable in quality from the close vowels, but admits them to be more like the close than the open vowels. I denote them here as *e*, *o*.

(1) Similar Vowels

27. *ă* + *ă* > *ā*: *vāṇū* (*vacana-*), *chāṇ* dung (*chagaṇa-*), *camār* (*carmakāra-*), *kūbhār* potter (*kumbhakāra-*), *śiyāḷo* (*śītakāla-*), *unāḷo* summer (*uṣṇakāla-*), *phaḷār* light meal (*phalāhāra-*), *bhāḍār* treasury (*bhaṇḍāgāra-*), *mãg* representation of a low-caste woman (*mātaṅga-*), *chāvaṇ* thatch < **chādāpana-* (*chādayati*).

ŭ + *ŭ* > *ū*: *bhūkh* hunger < *buhukkhā* (*bubhukṣā*); *gū* dung < **gūu* **gūho* (*gūtha-*).

(2) *ō* and *ē*

(*a*) *ē* + *a* > *ē*: *dēharū* temple < **dēvagarhakam*, *nēḍū* affection < *nēhaḍaü* (*snēha-*).

ē + *u* > *ē*: *bēhu* both < *dvē-ubhau*. Where *-u* (< *-ō*) is final, it becomes *-v* in Gujarātī, e.g. *bhēv* < *bhēō* (*bhēda-*), *parsēv* < *sēō* (*svēda-*), *mēvlo* rain, an extension of *mēv* < *mēhō* (*mēgha-*).

ō + *a* > *ō*: *sōnū* gold < *sōaṇṇa-* (*sauvarṇa-*), *janōī* (*yajñōpavīta-*).

ō + *ā* > *ō*: *vōhro* trader (*vyavahāra-*), unless this is a tatsama.

(*b*) *ō* + *ĭ*: (1) where in Gujarātī *i* belongs to an interior syllable it is absorbed: *jōśī* astronomer (*jyōtiṣin-*).

[1] *Ind. Ant.*, xliv, p. 19.

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(2) Otherwise *i* forms a diphthong with *ō*, which becomes more open: *ɔ̄i*, e.g. *kōyaḷ* [*kɔ̄iḷ*] cuckoo < *kōila-* (*kokila-*), *sɔ̄yo* < *sōī* + *o* (*saucika-*); *hɔ̄i* < *hōï* (*bhavati*), *nɔ̄i* < *na hōï*. (3) Where final *-ī* represents *-iă*, *-iu* it remains a separate syllable, e.g. *ḍōī*, *chōī*, *phōī*, except in *sɔ̄y* (*saucika-*), which is due to *sɔ̄yo*.

(*c*) *a* + *ē* > *ē*: *anērū* < *aṇṇaēraũ* (*anyakārya-*).

a + *ō* > *ō*: *pōḷ* (*pratōlī*).

(3) *ĭ* + *a* or *u*

ĭ + *a* > *ī*: *pīḷū* (*pītala-*), *śīḷū* (*śītala-*), *vīmo* venture (*viyama-*), *nīm* rule (*niyama-*); nom. sing. fem. *-ī* < *-ia*, *-iā* < *-ikā*: *mākhī* (*makṣikā*), *mūṭhī* (*muṣṭi-*), etc.

ĭ + *u* > *ī*: *pahī* < **pahiu*, *-iō* (*pathika-*), *dhaṇī* owner (*dhanin-*), *māchī* fisherman (*matsika-*), etc.

piu lover (*priya-*) is an archaic form.

(4) *-iaṁ*, *-iuṁ*

MI final *-iaṁ*, *-iuṁ* became *-ī* with loss of nasalization, due perhaps to the high position of the tongue leading to a corresponding raising of the velum and closure of the nasal passage. On the other hand, MI *-aaṁ*, OWR *-aũ*, being a low vowel, preserves the nasality (see below, § 28).

-iaṁ: *amī* nectar (*amṛtam*), *mōtī* (*mauktikam*), *mahī* curds (*mathitam*), *khāī* food (*khāditam*), *ghī* (*ghṛtam*).

dahĩ curds represents not *dadhikam* but *dadhīni*, Pkt. *dahīṇi*, *dahīiṁ*, *dahīī*.

-iuṁ: the suffix *-ī* of verbs used in combination with *śakvũ* be able (e.g. *mārī śakeche*) is not the conjunctive participle (< Pkt. *-ia*), but originally the infinitive (< Pkt. *-iuṁ*, Skt. *-itum*).

(5) *u* + *a*

u + *a* > *ū*: *sūḍo* parrot < **suaḍaï* (*śuka-*); *ukhāṇ* (*upakhyāna-*), nom. sing. fem. *ū* < *-ua*, *-uā* < *-ukā*: *vahū* (*vadhū-*), *sāsū* (*śvaśrū-*), *vāḷū* (*vālukā*).

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(6) *ĭ* + *á*, *iaü*

ĭ + accented *á* > *iyā*, *yā*. This must be clearly distinguished from *ĭ* + unaccented *a* above; e.g. *śiyāḷ* (*śṛgāla-*), *śiyāḷo* (*śītakāla-*), *piyās* thirst (*pipāsā*), *piyār* (*priyakāra-*).

MI *-iaü* > *-yo*, past part. *-yo* < *-iaü* < **-ita-ka-*, e.g. *māgyo*, OWR *māgiaü*.

a + *i* or *u*

28. (1) The earliest contraction in MI occurred where, owing to the early loss of intervocalic *y* or *v* in interior syllables, *a* and *i* or *a* and *u* came into contact.

a + *i* (on loss of *-v-* under conditions not yet specified) > *ē*, Pa. *thēra-* (*sthavira-*).

a + *u* (on loss of *-y-*): G. *mōr*, Pa. *mōra-* (*mayūra-*).

The history of *kēḷī* plaintain (Pkt. *kēlī* < ?**kadilī*: Skt. *kadalī*), *bōrḍū* jujube-tree (Pkt. *bōra-* < ?**badura-*: Skt. *badara-*) is obscure.

(2) Otherwise MI *aĭ*, *aŭ*, due to the loss of intervocalic stops, were maintained separately into the OWR period. They then became the diphthongs *ai*, *au*, which have remained in some of the MI languages, but in Gujarātī further developed to *ẽ*, *õ*.[1] Before and after this *ẽ* Gujarātī *s* remains unchanged.

(*a*) *áï*: *pẽsvũ* enter (*praviśati*), *bẽhr* deaf (*badhira-*), *chẽ* is (Pa. *acchati*), *sẽ̃* 100 (OWR *saĩ* for *sāĩ̃*, Ap. *saāĩ̃*, Skt. *śatāni* under influence of *saũ*, Skt. *śatam*), *bẽhṇ* sister (*bhaginī*), *bhẽs* buffalo-cow (*mahiṣī*), *pẽhrvũ* put on (OWR *pahiraï*), *bẽsvũ* sit (*upaviśati*).

aĩ̃: *pẽṭhũ* (*praviṣṭa-*), *bẽṭhũ* (*upaviṣṭa-*), *pẽhlũ* first (Ap. *pahillaü*), *ghẽlũ* mad < **gahillaü* (*grathila-*).

aĩ: *ghẽrũ* deep-coloured (*gabhīra-*).

(*b*) *áü*: *nõḷiyo* mongoose (*nakula-*), *põhḷũ* (*pṛthula-*), *bõhḷu* big (*bahula-*), *lõḍo* (*lakuṭa-*), *hõṇ* this year (*adhunā*),

[1] Discussed more fully in Sir Ashutosh Mukerji Jubilee Volumes (Orientalia), art. Turner, "*e* and *o* vowels in Gujarātī."

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chō let be! (Pa. *acchatu*), *tō* then (*tataḥ*), *bhō*, m. fear (*bhaya-*), *vōh* flow (*vaha-*), *sō* 100 (*śata-*); *cōbo* (*caturvēda-*) is shown by its *b* to be a loanword.

aiĩ: *cōth* (*catụrthī*), *cōk* (*catuṣka-*), *cɔmāsũ* monsoon (*caturmāsa-*), and other words with *cɔ̃-* = Skt. *catur-*, *pōṇũ* ¾ (*pāda-ūna-*), *sɔ̄phā* aniseed (*śatapuṣpa-*).

(*c*) Similarly in other words of doubtful etymology G. *ē*, *ɔ̄* correspond to other MI languages *ai*, *au*, e.g. *khēcvũ* (H. *khaĩcnā*), *gẽḍo* (H. *gaĩṛā*), *thēlī* (H. *thaĩlī*), *bēl* (Pkt. *baĩlla-*, H. *bail*), *mēlũ* (H. *mailā*), etc.

(*d*) Loanwords with the diphthongs *ai*, *au* appear with *ɛ̄*, *ɔ* in Gujarātī, whether (1) tatsamas, e.g. *vɛ̄r* (*vaira-*), *bɛ̄rāg* (*vairāgya-*), *gɔ̄rav* (*gaurava-*), *sɔbhāg* (*saubhāgya-*), or (2) Arabic, Persian, or English loanwords.[1]

(3) In final postaccentual syllables *ē*, *ɔ̄* are shortened and become more close, being nearer to *e*, *o* than to *ɛ*, *ɔ*.

(*a*) *-aï* : *ne* and (Ap. *aṇṇaï* : *anya-*), 3rd sing. pres. *-e* (*-ati*), 2nd sing. *-e* (Ap. *-ahi*), 3rd plur. *-e* (Ap. *-ahĩ*), inst. sing. *-e* (Ap. *-aĩ̃*, Pkt. *aēṇa* = *-aeṁ*, Skt. *-akēna*), loc. sing. *-e* (Ap. *-ahĩ*, Skt. *-asmin* or Pkt. *-aē*, Skt. *-akē*).

-aü, 3rd sing. imperat. *-o* (*-atu*), 2nd plur. pres. *-o* (Ap. *-ahu* < **-athah*), nom. sing. masc. *-o* (Ap. *-aü*, Skt. *-akaḥ*).

(*b*) In compounds the accent of the first member was retained. This is shown by the OWR forms where the second member is weakened, a long vowel or consonant being shortened, e.g. *rāṭhaüḍa* (*rāṣṭrakūṭa-*), *cītaüḍa* (*citrakūṭa-*) *sīhaüta* (*siṁhaputra-*).

Words of this type appear with *o* in Gujarātī.

29. *ĭ* + G. *ō* or *ā* became *-iyo* *-iyā* : *vāṇiyo* trader : **vāṇī* < *vāṇiĩjaḥ*; *sāthiyo* auspicious mark : **sāthī* < *svastikaḥ*, *āgiyo* glow-worm, *govāḷiyo* cowherd, *kāḷiyũ* black, *ghāsiyo* grass-cutter, etc., *nōḷiyo* : **nōḷī* < **nakulikā* (*nakula-*).

ū + G *ō* or *ā* became *-uvo* *uvā* : *kuvo* well < **kūaü* (*kūpa-*), *jaḷjābuvo* a waterplant : *jābū*, *juvo* an insect : *jū*.

[1] Examples in my article quoted above.

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Samprasāraṇa

30. (1) The tendency towards samprasāraṇa or the absorption of short *a* by preceding *av* or *ay* was at work early in the history of the Indo-aryan languages; and already in Pali Skt. *aya ava* were represented by *ē, ō*, which, in their subsequent development, converge completely with MI *ē, ō*, whether representing PI *ē, ō* or *ai, au*.

PI *aya* : *dēvũ* give (P. *dēti* < **dayati* : *dadāti*).

PI *ava* : *hōvũ* be (*bhavati*), *ōs* dew (*avaśyā*), *ośiyāḷũ* dependent (*avaśin-*), *ōchũ* remaining (*avacchita-*), *kōḷiyũ* (*kavala-*).

(2) This principle continued active in the MI period after intervocalic *-p-*, still maintained in Pali and the Asoka inscriptions, had become *-v-*, e.g. Pkt. *ōsaraï* (*apasarati*) *ōāsa-* (**apavāsa*), *ōhattha-* (**apahasta-*).

MI *ava* < PI *apa* : *khōvũ* lose (*kṣapaṇa-*), *ōṭ* ebb (*apavṛtti-*).

Skt. *apa* appears in some G. words as *ō*. In these cases *apa ava* was reintroduced as a literary loan at a later period, e.g. *ōsarvũ* (*apasarati*); while under certain conditions, as perhaps when PI *apa* was followed by two or more consonants, it remained as *ava* through the MI period, e.g. *kōḍī* cowrie (OWR *kaüḍī*, Pkt. *kavaḍḍiā*, Skt. *kaparda-*, attested in RV *kapardín-*).

(3) *aya* and *ava* of new formation in late MI are also affected by the same principle, but the process begun in OWR, where we have forms like *gavakha, kasavaṭī, phalavadhī, karavata*, beside *gaükha, kasaüṭī, phalaüdhī, karaüta*, has not gone so far, and the resultant sounds at present are *ē, ō*, as in the case of MI *aï, aü*. Similarly, in the postaccentual syllable they become *e, o*.

(*a*) Late MI *aya* (in loanwords from Skt., literary and Jaina Pkt., or some dialect which avoided hiatus between *a-a* by *-y-*), ts. *nēṇ* (*nayana-*), *rēṇ* (OWR *rayaṇi*, Skt. *rajanī*), *vēṇ* (OWR *vayaṇa*, Skt. *vacana-*).

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Late MI *ava* < Skt. *ava* : *nɔ̃m* 9th day (*navamī*) reformed after *nav*.

< Skt. *avā* : *gɔ̃kh* (*gavākṣa-*).

< Skt. *apa* : *ɔ̃sarvũ* (*apasarati*), *ɔ̃galvũ* melt (**apagalati*), *ɔ̃r* other (*apara-*), *nɔ̃khũ* separate (*anyapakṣa-*), *kɔ̃ṇ* who? (OWR *kaüṇa*, *kavaṇa*, Skt. *kaḥ punaḥ*), *kɔ̃ḍī* (*kaparda-*).

< Skt. *apā* : *ɔ̃rũ* on this side (*apāra-*).

< Skt. *amá* : *sɔ̃ghũ* cheap (*samargha-*), *sɔ̃pvũ* give over (*samarpayati*), *sɔ̃gũ* disguise (*samāṅga-*), *sɔ̃dhã* a scent (*samagandha-*).

mɔ̃ghũ dear (*mahārgha-*) after *sɔ̃ghũ*. *jɔ̃ḷ* turns (*yamala-*) is shown to be a loanword by the disappearance of postaccentual *-m-*.

(*b*) In the postaccentual syllable of compounds (see above, § 28) late MI *ava* : *Phaḷodhī* (OWR *phalavadhī* < **phala-vardhikā*), *kasoṭī* (OWR *kasavaṭī* < *kaṣa-paṭṭikā*), *bāroṭ* (OWR *bāravaṭa-*), *dēśoṭo* (OWR *dēsavaṭaü*), *karot* (OWR *karavata* < *kara-pattra-*).

Epenthesis

31. Beside words with the termination *-rya-* there existed doublets with *-ria-*, *-riya-*. These are found in the Rigveda[1] and in considerable numbers in the Prakrit dialects[2]; e.g. Pkt. *kajja-* or *kēra-* (*kārya-*), G. *kāj* and *anērũ* (**anya-kāria-*). In Gujarātī *-ērũ* as a suffix has been extended in use: e.g. *ghaṇērũ* plentiful (*ghana-*), *bhalērũ* kind (: *bhalũ*), *vachēro* foal (: *vācho*).

In Surat and Broach *ry* > *ir*: e.g. *māryo* > *māiro*. In standard Gujarātī there is epenthesis in the group *vy*: e.g. *āvyo* > *āivyo*.[3]

Anaptyxis

32. In a number of words containing *-rs-* in Sanskrit, an anaptyctic vowel, usually *i*, has been inserted between *r* and *s* in Prakrit.[4] Whether these represent old doublets,

[1] Macdonell, *Vedic Grammar*, § 48*a*, 1.
[2] Pischel, § 134, 176.
[3] LSI ix, 2, p. 331.
[4] Pischel, §§ 131–40.

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like Latin *extemplo* beside *extempulo*, etc., or are loan-words from literary Sanskrit, cannot be said. The beginnings of the process are, at any rate, seen in the Rigveda: here a svarabhakti vowel is sometimes developed where a consonant is in conjunction with *r* or a nasal.[1] In any case some of the Pkt. words showing this phenomenon, if tatsamas in origin, must have been borrowed from Sanskrit after the assimilation of *-rs-* to *-ss-* and before the disappearance of intervocalic consonants, e.g. *ādarśa-*, Pkt. *āarisa-*, *sarṣapa-*, Pkt. *sarisava-*. These appear in Gujarātī as *ārso* mirror, *sarsav* rape-seed. Similarly *amla-* appears as Pkt. *ambila* (< **ambla-*), G. *āmḷū* hog-plum.

Umlaut

33. A number of words in Gujarātī containing *a* < Skt. *a* have variants with *ɛ̄* in the accented syllable, *e* in the unaccented, in place of *a*. In some cases only the *ɛ̄* forms are used; e.g. *ghēr* at home < **ghari* < **garhe*.

The majority of these words are nouns, all of which are feminine, and mostly corresponding to Skt. forms in *-ĭ*. It appears that this *ĭ*, surviving into the OWR period, has affected, at least in some Gujarātī dialect, the quality of the preceding *a*.

kēḍ or *kaḍ* f. waist (*kaṭi-*), *mēs* f. ink (*maśī*), *hēḍ* f. fetter (*haḍi-* in Divyāvadāna), *khēḷ* f. paste (: M. *khaḷ*), *cēḷ* or *caḷ* f. itching, *pēr* f. manner (: N. *pari*), *tēḍ* f. bank (*taṭa-*), *nēḷ* or *naḷ* f. tube (*nala-*), *sēr* or *sar* f. string in *mōtīnī sēr* a string of pearls.

Compare also the pronunciation *tērikh* beside *tārikh* date.

[1] Macdonell, op. cit., § 21.

(To be continued.)

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The Plays of Bhāsa

By A. BANERJI-ŚĀSTRĪ, M.A.

TOWARDS the beginning of the fifth century A.D. Kālidāsa made his *début* with an apology for his temerity in addressing an audience accustomed to such old, well-established authors as "Bhāsa and others".[1] After the lapse of fifteen centuries Kālidāsa has held his own, while Bhāsa is practically forgotten. The reason is not the decisive verdict of Time, but the unfortunate loss of his works. But lately came a surprise. In 1912 Gaṇapati Śāstrī discovered and published thirteen dramas in the Trivandrum Sanskrit Series,[2] and claimed them as Bhāsa's. For the past eight years Orientalists have been considering this claim, the general trend of opinion being unfavourable. The present article proposes to supplement the progress already made in the investigation of this question, and to point out the facts practically settled, thus paving the way for further research.

The method followed here is, firstly, to criticize the probability of the various theories advanced as regards the authorship of the Trivandrum group,[3] and, secondly, in the light of this criticism to attempt to determine its age and authorship, with special reference to the internal evidence. There are three important theories—

1. Gaṇapati's [4]: That the author is Bhāsa, and the age about fourth century B.C.

2. Lesný's [5]: That these plays are older than Kālidāsa's (fifth century A.D.), but younger than Aśvaghoṣa's (*c.* third century A.D.).

[1] F. Bollensen, *Mālavikā und Agnimitra*, pp. 3–4.
[2] Trivandrum Sanskrit Series, vols. xv–xvii, xx–xxii, xxvi, xxxix, xlii.
[3] Ibid.
[4] Introduction to *Svapnavāsavadattā*, vol. xv, 1912.
[5] *ZDMG.* 1918, p. 203 f.

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3. Barnett's [1]: That the age is the seventh century A.D., and the author is unknown.

We begin with the last as the most improbable. In its support are quoted only two pieces of evidence: (1) the technique of the Trivandrum group is similar to that of a seventh century play called "Mattavilāsa" [2]; (2) a supposed reference to a seventh century king called "Rājasiṁha".[3]

(1) The technique comprises three parts: the plays open with the stage direction or *nāndī*, omitting the *nāndī* itself (i.e. the verse in praise of the Deity); after the *nāndī* the director (*sūtradhāra*) enters and recites the introductory verse (praising the Deity); then comes the assistant of the stage-manager (*pāripārśvika*) and discusses the play.

Barnett's point is that this peculiar technique is no indication of "a date earlier than that of Kālidāsa" (fifth century A.D.), because "*Mattavilāsa* (seventh century A.D.) shows exactly the same features of technique".[4] Here there is evidently a confusion of two issues. The first issue, viz. whether it is an evidence of antiquity, stands by itself, and need not be obscured by the second issue, viz. how it is retained in a farce of the seventh century A.D. The first issue can be settled in the affirmative by comparing it with the suggestive note of Sten Konow [5] on the stage-management of *karpūramañjarī*, which "has on this point preserved traces of a more ancient stage of development in this branch of literature". There the prologue is divided into three scenes: (i) the director (*sūtradhāra*) enters and recites the benediction (*nāndī*), i.e. a praise of the Deity [then exit]; (ii) the stage-manager (*sthāpaka*) enters, praises the Deity, and describes the preparations for the play; (iii) the assistant of the

[1] *Bulletin of the School of Oriental Studies*, London Institution, 1920, pp. 35–8.

[2] Trivandrum Sanskrit Series, vol. lv.

[3] Ibid., p. 1, and *Bulletin of the School of Oriental Studies*, 1920, p. 38.

[4] *Bulletin of the School of Oriental Studies*, London Institution, 1920, p. 38.

[5] Sten Konow & Lanman, Rājaśekhara's *Karpūramañjarī*, p. 196.

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stage-manager (*pāripārśvika*) enters and discusses the merits of the play. Sten Konow rightly observes that "to judge from some indications in the rhetorical literature, we must suppose that in early times a *Sthāpaka*, as well as the *Sūtradhāra*, had something to do with the arrangement of the play". This is abundantly borne out by Bharata's *Nāṭyaśāstra*, v, 163–4, and *Sāhityadarpaṇa*, 283*a*, *b*. Besides the *sūtradhāra*, the existence of another actor, known as the *sthāpaka*, i.e. introducer, is explicitly recorded by Dhanañjaya in his *Daśarūpa*.[1] But in most of the known plays the *sthāpaka* has disappeared. Pischel[2] has suggested that this fact is owing to a reformation by Bhāsa. This reformation took the practical shape of omitting the superfluous. As shown above, in the earliest times there were three different characters with three different functions. The superfluity lay in the first function overlapping the second; the *sūtradhāra* had to praise a deity (i.e. the *nāndī*), the *sthāpaka* also had to praise a deity, besides introducing the play. This extravagance of piety, however creditable to his predecessor's patience, failed to impress Bhāsa's more fastidious contemporaries. So he suppressed the first praise, i.e. the *nāndī*, thenceforward uttered in the green-room, if at all, and made the *sūtradhāra*, thus set free, perform the function of the *sthāpaka*, viz. to introduce the play as well as praise a deity. The *sthāpaka* thus disappeared from the scene. This characteristic, a bold reform, served to distinguish Bhāsa from every other dramatist, and is contained in the well-known verse of Bāṇa[3]— "by his plays with introductions spoken by the *Sūtradhāra* (Director)" and not by the *sthāpaka* (stage-manager) as usual hitherto. This trait of Bhāsa exactly tallies with the technique of the Trivandrum group. It clearly proves an early age, and is a point in favour of their identity.

How then does it occur in a seventh century play? The

[1] Haas, *Daśarūpa*, pp. 79–80.
[2] Pischel, *Göttingische Gelehrte Anzeigen*, 1883, p. 1234.
[3] *Harṣacarita*, v, 15.

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answer is quite obvious. Kālidāsa presumably profited by Bhāsa's experiment and its result. He suppressed the second praise and restored the first praise, i.e. the *nāndī* which introduces the play, the *sūtradhāra* coming on the stage after it. Bhāsa's reform gradually fell into disuse, probably owing to the loss of his works. But his memory still lingered amongst a few in the south-east of India, and Mahendravikramavarman tried in the seventh century A.D. to reinstate his technique in his *Mattavilāsa*. He was neither the first nor the last to attempt such a thing. About A.D. 900 Rājaśekhara[1] made a similar attempt in his *Karpūramañjarī* to resuscitate Bharata's technique in its entirety. *Pārvatīpariṇaya* again bears a close resemblance to *Karpūramañjarī*. It would be absurd to claim from the similarity of their technique only that Bharata and Rājaśekhara were contemporaries; it would be equally absurd to suggest that the author of the Trivandrum group and Mahendravikramavarman were contemporaries on the same ground. It is Fluellen over again: "There is a river in Macedon; and there is also, moreover, a river at Monmouth; . . . and there is salmons in both." But even the salmon are not alike. According to Barnett,[2] "the *Mattavilāsa* shows *exactly* the same features of technique" as the Trivandrum series. According to Sylvain Lévi,[3] "the Trivandrum 'Bhāsa' conforms *scrupulously* to the classical rules of the Indian Aristotle Bharata." According to MM. Haraprasad Śāstrī,[4] "Bhāsa (of the Trivandrum Series) disregards *altogether* the rules of dramaturgy laid down in Bharata." All these three strong statements are equally wrong. The fact is that the Trivandrum author was following a *Nāṭyaśāstra* similar to but not the same as the current Bharata; perhaps one of those referred to by Pāṇini[5] as composed by Śilāli or Kṛśāśva prior to Bharata,

[1] Sten Konow & Lanman, Rājaśekhara's *Karpūramañjarī*, 1901.
[2] *Bulletin of the School of Oriental Studies*, London Institution, p. 38.
[3] *Vāsavadattā*, par Albert Baston, Préface, p. iii.
[4] *JBAS.* 1912.
[5] *Pāṇini*, IV, iii, 110, 111.

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or perhaps one by himself as suggested by *Arthadyotanikā*.[1] Whereas Mahendravikramavarman, while imitating Bhāsa, felt himself constrained to follow at least those of the rules of Bharata which in the interval, from after Bhāsa to his own time, had been adopted almost universally. To give a single illustration, rule v, 254 of Bharata[2] lays down "the mentioning of the poet's name". The Trivandrum author is apparently unaware of it and so ignores it, exactly as Bhāsa would have done. While a seventh century playwright, Mahendravikramavarman, has to obey it. This is a point in itself sufficient to show that they belonged to widely different periods of dramatic development.

Barnett's second piece of evidence is still more liable to criticism. He takes *rājasiṁha* as the name of a seventh century king Teramāran Rājasiṁha I (*c.* A.D. 675). It is true that seven[3] out of the thirteen dramas under discussion contain, in the final verse, the line "may our *rājasiṁha* rule this world", with slight variations. But there is absolutely no evidence to show that it names a king Rājasiṁha, and does not simply mean a "lion-like", i.e. great king. On the contrary, there is sufficient evidence to show that the latter is the only proper and possible meaning: firstly, because three of the books[4] do not mention any king whatever; secondly, in three others[5] the simple *rājā* and *narapati*, which can never mean anything more than "king" in its general connotation, are substituted for *rājasiṁha* in the very same context, with the same words, signifying the same thing. Every Indian court poet is a living illustration of Max Müller's Henotheism; his patron the king naturally appears to him as a lion and the only one. It is impossible to escape from hundreds of such *rājasiṁhas* in successive centuries, but to

[1] Sylvain Lévi, *Le Théatre Indien*, 1890, p. 160.
[2] Bharata's *Nāṭyaśāstra*, Kāvyamālā Series, v, 154.
[3] *Svapna.*, *Pratijñā.*, *Pañca.*, *Avimā.*, *Bāla.*, *Dūtavā.*, and *Abhiṣeka.*
[4] *Madhyama.*, *Dūtagha.*, and *Cārudatta.*
[5] *Karṇa.*, *Pratimā.*, and *Ūrubhaṅga.*

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fancy an identity without positive proof would be a hasty supposition. Thus the seventh century theory ceases to be of any interest in further discussions on the subject.

2. Then comes Lesný's[1] theory that (*a*) the plays are older than Kālidāsa's and (*b*) younger than Aśvaghoṣa's.

(*a*) Even a cursory glance at the Trivandrum Prākṛts bears out the first point. The following characteristics are amply illustrated by the thirteen books: (i) The Trivandrum author (T.) often drops *k*, *g*, *c*, *j*, *t*, *d*, *p*, *b*, *v*, and *y* between vowels, cf. *avimāraa* for *avimāraka*, etc., Kālidāsa and later (K.) as often drop as retain; (ii) T. sometimes changes *y* into *j*, but more often retains the *y*, K. always changes *y* into *j*; (iii) T. has *dissadi* all along except three times *disadi*, K. always *disadi*; (iv) T. shortens the vowel and doubles the consonant in *ĕvaam*, etc., as well as retains the older form, K. never uses the older form; (v) T. uses the three forms *ea*, *eka*, and *ĕkka*, K. only *ĕkka*; (vi) T. changes *ry* into *yy*, the older form according to Hemacandra, K. *ry* always into *jj*; (vii) T.[2] uses *hmi* and *hṇ*, K. *mhi* and *ṇh*; (viii) T. uses both *amhāaṁ* and *amhāṇaṁ* as the gen. pl. 1st pers. pron., K. only *amhāṇaṁ*; (ix) T.[3] uses both *ahake* (only once) and *ahaṁ* as nom. 1st pers. pron., K. *hake* and *hagge*; (x) T. uses both √*rh* and √*rih* or √*ruh*, i.e. with an epenthetic or without, K. only √*rih*; (xi) T.[4] has *āma* meaning "yes" as found in Old Pāli, K. has lost the form altogether; (xii) T. *karia* meaning *kṛtvā* and *gacchia* meaning *gatvā*, K. *kadua* and *gadua* regularly, while, *karia* in Nāgarī and S. Indian MSS. is exceptional; (xiii) T. *kissa* (Śaurasenī), *kiśśa* (Māgadhī), and *kisa* (once), meaning the ablative *kasmāt*, K. *kīsa* (Śaurasenī), *kīśa* (Māgadhī), and *kissa* (once), similarly T. *dissa* (Śaurasenī), *diśśa* (Māgadhī), and *disa*, K. *dīsa* (Śaurasenī), *dīśa* (Māgadhī), and *dissa* (only in Ardha-Māgadhī and Jaina

[1] *ZDMG.* 1918, p. 203 f.
[2] Woolner, *Introduction to Prakrit*, p. 78.
[3] Sukthankar: *JAOS.*, vol. xl, pp. 248-59.
[4] MM. Haraprasad Śāstrī: *JBAS.* 1912.

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canon); (xiv) T. does not double initial in *khu*, sometimes changes it into *hu* as *ṇa* + *khu* becomes *ṇahu*, K. doubles initial *khu* after short vowels and *e* and *o*, but not after long vowels; (xv) T. has *tava* and *te*, the gen. 2nd pers. sing. for all dialects, K. *tu(m)ha* and *tujjha* for Śaurasenī, while *tava* is restricted to Māgadhī, Ardha-Māgadhī, and Jaina Mahārāṣṭrī; (xvi) T. has *tuvaṁ* and sporadically *tumaṁ* as the nom. 2nd pers. pl., K. has only *tumaṁ*; (xvii) T.[1] *vaaṁ* and *vayaṁ* (both Śaurasenī) and *amhe* (thrice) as the nom. 1st pers. pl., K. only *amhe*.

In each of the above instances the Trivandrum Prākṛt must be regarded as older for any of the following reasons:—

(*a*) Vararuci, Mārkaṇḍeya, Hemacandra, etc., the oldest known Prākṛt grammarians, mention them as old forms, though instances are not always available; (*b*) Aśvaghoṣa (second and third centuries A.D.), admittedly prior to Kālidāsa (fifth century A.D.), has the same forms; (*c*) they are used in ancient inscriptional Prākṛt; (*d*) they are retained in Old Pāli.

An analysis of the Prākṛt thus leaves no reasonable doubt that the Trivandrum author is earlier than Kālidāsa (fifth century A.D.). And out of the seventeen instances quoted, all, save perhaps four, point to a period of transition when, along with the older forms, the newer were just coming into use.

(*b*) The second part of Lesný's theory claims the Trivandrum author as younger than Aśvaghoṣa (second and third centuries A.D.). Aśvaghoṣa, it is suggested, stands to him in the same relation as the latter stands to Kālidāsa. The first agrees with the second in using forms altogether lost to the third. Aśvaghoṣa's forms again are, it is urged, sometimes as much older than the Trivandrum author's as the latter's are to Kālidāsa's. The following are instances in point: (i) Aśvaghoṣa (A.) nowhere changes *y* into *j* (cf. Lüders,[2]

[1] Sukthankar: *JAOS.*, vol. xl, pp. 248–59.
[2] Lüders, *Bruchstücke buddhistischer Dramen*, 1911.

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1911, s. 48); T. often changes (cf. *jadi* for *yadi*), sometimes not (cf. *yāhi* for *yāhi*). (ii) A.[1] does not drop consonants between vowels (cf. Lüders, ss. 36, 42, 48, 60); T. sometimes drops them (cf. *modaa* for *modaka*). (iii) A. changes *t* into *d* only once, cf. *surada* for *surata* (Lüders, s. 48); T. frequently changes medial *ṭ* into *ḍ*, cf. *ghoḍaa* for *ghoṭaka*, and medial *t* into *d*, cf. *avajidi* for *avajiti*. (iv) A. does not change *n* into *ṇ* (cf. Lüders, s. 48); T. changes *na* into *ṇa*, cf. *attāṇaṁ* for *ātmānaṁ*. (v) A. turns Śaurasenī *jñ* into *ññ* (cf. Lüders, s. 49); T. turns *jñ* into *ññ* or strengthens it into *ṇṇ*, cf. *viññāna* and *viṇṇāna* for *vijñāna*. (vi) A. only simplifies a consonant group (cf. Lüders, ss. 49, 55); T. both simplifies it and lengthens the preceding vowel, cf. *śīsa* for *śirṣa*. (vii) A. only *dissadi* (cf. Lüders, s. 55); T. *dissadi* as well as *dīsadi* (thrice). (viii) A. retains the older form *evám* (cf. Lüders, Pischel, Gramm., § 541); T. rarely retains *evám*, but shortens the vowel and doubles the consonant, cf. *děvva* for *daiva*. (ix) A. turns *ṇy* into *ññ* (cf. Lüders, s. 49); T. changes *ṇy* and *ny* into *ṇṇ*, cf. *aṇṇa* for *anya*. (x) A. keeps untouched *kh*, *gh*, *th*, *dh*, *ph*, and *bh* (cf. Lüders, ss. 42, 52); T. modifies the consonant, cf. *ahimuha* for *adhimukha*. (xi) A. changes *ry* into *yy* (cf. Lüders, s. 60); T. the same as Aśvaghoṣa, cf. *kayya* for *kārya*. (xii) A. uses *āma* in the sense of "yes" as in Old Pāli (cf. Lüders, s. 46); T. the same as A.

On the basis of the above evidence, Lesný[2] agrees with Winternitz[3] in assigning to the Trivandrum author a date at the beginning of the fourth century A.D. But a closer examination of the list will show that the difference between Aśvaghoṣa and the Trivandrum author is by no means so marked as that between the latter and Kālidāsa. Out of the twelve instances cited, in only two (ix and x) do the two authors differ substantially, just as in two others (xi and xii) they are exactly alike, and altogether different from later dramatists. The rest are cases where Aśvaghoṣa uses only

[1] Lesný, *ZDMG.* 1918, p. 203 f.
[2] Ibid. [3] *Festschrift für Ernst Kuhn*, s. 301.

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one form, the Trivandrum author two—one identical with Aśvaghoṣa's, the other not necessarily similar to Kālidāsa's. The arguments for the fourth century theory are mainly three : (*a*) A. uses forms which are neither known to Kālidāsa nor lead up to him as some forms of T. do ; (*b*) A. contains some forms unknown to T. ; (*c*) T. uses two or more forms for the same word, only one being found in A. The first two prove the contrary equally well.

(*a*) T. uses forms which are neither known to Kālidāsa nor lead up to him ; cf. (i) T.,[1] like A., uses *ni* as nom. acc. pl. of neut. *a*-stem (cf. Lüders, s. 59), K.[2] *ṇi* and *iṁ* ; (ii) T. uses *attāṇaṁ* (cf. *Avimā.* 21, 28, 70, 77, 82, 83, and *Abhiṣe.* 15, 21, 28), later *attāṇaaṁ* ; (iii) T. has *āma*, meaning yes, later altogether lost.

(*b*) T. contains some forms unknown to A. as well as to later dramatists. Cf. (i) A. uses *vayaṁ* as the nom. pl. 1st pers. pronoun, K. *amhe* ; T., besides *vayaṁ* and *amhe*, uses *vaaṁ*,[3] which is unknown to either. (ii) A. the hypothetical *am*[*h*]*āk*[*aṁ*][4] corresponding to *tum*[*h*]*āk*[*aṁ*] as the gen. pl. 1st pers. pronoun, K. *amhaṁ* or *amhāṇaṁ* ; T., besides *amhāṇaṁ*, uses *amhāaṁ*, unknown to either. (iii) The doubtful case of *hmi* (Old Māgadhī) ; A. *iya . mhi*, cf. Lüders, *SBAW.* 1911, s. 410 ; K. *mhi* ; T. *hmi*.

(*c*) It is true that T. sometimes uses more than one form for the same word, only one of which agrees with Aśvaghoṣa's, but is this an indication of a long interval between the two ? Is it enough to place the Trivandrum author subsequent to Aśvaghoṣa ? Their striking similarity is admitted, but the points of divergence are emphasized. These latter are essentially problematic. They rest on the assumption that the materials for comparison between Aśvaghoṣa and the Trivandrum author are as sufficient as those for a comparison between the latter and Kālidāsa and his successors. Nothing is further from the truth. The supposed differences might

[1] *ZDMG.* 1918, p. 205. [2] Ibid. ; also Pischel, Gramm., 367.
[3] *ZDMG.* 1918, p. 204. [4] Sukthankar, *JAOS.*, vol. xl, pp. 48–59.

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disappear to a large extent if more facts from Aśvaghoṣa were available to supplement the very scanty materials at hand. This possibility is strengthened by inscriptional Prākṛt. Aśvaghoṣa lived about second or third century A.D., Aśoka in the third century B.C. The latter's inscriptions sometimes bear out the antiquity of a few of these very forms, which, being unknown to the extant Aśvaghoṣa, are sought to be relegated to a later period. The following may be singled out: (i) A. never changes *y* into *j* (cf. Lüders, s. 48); T. sometimes does, sometimes not; Aśoka sometimes changes *y* into *j*, though extremely rarely, cf. *ja*, *javarajaya*, and *jacavaṭhiya*, all three Kālsī forms,[1] in Senart's Index to the Aśoka Inscriptions. (ii) A. never changes *n* into *ṇ* (cf. Lüders, s. 48); T. changes *na* into *ṇa* (see above); Aśoka sometimes does, though rarely, cf. *nihamaṇam* for *niyamanam*, Kālsī form, Senart's Index. (iii) A. keeps untouched *kh*, *dh*, *gh*, *th*, *ph*, and *bh* (cf. Lüders, ss. 42, 52); T. modifies the consonant (see above); Aśoka sometimes modifies, though rarely, cf. *ni*(*go*)*hakubhā*[2] for *nya*(*gro*)*dhaguhā* (Barābar inscr.) and *āhāle* for *ādhāre* (Sārnāth inscr.), cf. Senart's Index.

If even so early as the Aśokan period (third century B.C.) such sporadic instances are available, there is nothing against their being known about Aśvaghoṣa's time or earlier still and preserved in the Trivandrum series. A further consideration, as Lesný[3] points out, lies in Aśvaghoṣa's Prākṛt fitting in with those of Vararuci and Kātyāyana—some of whose forms are later than the Trivandrum author—e.g. *ry*, *jñ*, and nom. acc. pl. of neut. *a*-stem. Thus, from part of the internal evidence, i.e. a study of the Prākṛts, it is clear that the Trivandrum author was immediately after, if not contemporary with, Aśvaghoṣa (second and third centuries A.D.). This is corroborated by two other points:—

(*a*) The influence of Aśvaghoṣa is writ large on subsequent writers like Kālidāsa and Bhāravi. He was "the

[1] É. Senart, *Les Inscriptions de Piyadasi*, vol. ii, Index, p. 570.
[2] Ibid., p. 580. [3] Lesný, *ZDMG*. 1918.

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Buddhist Ennius, who gave the first inspiration to the Hindu Virgil", as Cowell[1] remarked long before the Trivandrum find. The influence of the Trivandrum author,[2] again, on the same is at least as prominent and certainly more explicit. But with the exception of a single śloka,[3] *Buddhacarita*, xiii, 60, and *Pratijñā*, i, 18, Aśvaghosa and the Trivandrum author are mutual strangers. A long interval between the two stands in the way of the latter's independence of the former, who had such a hold over playwrights that succeeded both. The only explanation is close proximity in time, each unknown or of little importance to the other.

(*b*) The religious spirit of the two authors, while entirely antagonistic, conforms to the known account of the second and third centuries in India. In the north, Kaniṣka was setting up Mahāyāna Buddhism,[4] the result of a "complex interaction of Indian, Zoroastrian, Christian, Gnostic, and Hellenic elements", as a forlorn hope against the rising supremacy of revived Brāhmaṇism—first asserted by Puṣyamitra, then triumphantly proclaimed by queen-mother Balaśrī in the second century,[5] and carried on by the Brāhmaṇical Andhras in the south. The violent diatribe[6] against the Brāhmaṇas in Aśvaghoṣa's Vajrasūci explains and is explained by the dignified contempt for the Buddhist in *Pratijñā*, pp. 43–6, and a calm vindication of a Brāhmaṇa's superiority in *Pañcarātra*, i, 25, p. 7. One may well appreciate the brilliant Buddhist's bitterness in having to pronounce his fine denunciations against the Brāhmaṇas in the latter's own language or renounce every chance of reaching the mass. But all was over by the end of the third century. Buddhism was not only defeated but discredited. And the poignant Brāhmaṇa-Buddhist controversy which stirs the subtle

[1] E. B. Cowell, The *Buddha-karita* of Aśvaghoṣa, 1893, pp. vi–x.
[2] T. Gaṇapati Śāstrī, Introduction to *Svapnavāsavadattā*, pp. iii–xi.
[3] Sten Konow, *Das Indische Drama*, 1920, p. 51.
[4] V. A. Smith, *Early History of India*, 1908, p. 284.
[5] Bühler, "Inscription at Kārlī, No. 17": *ASWI.* iv, 109.
[6] Édouard Huber, Aśvaghoṣa's *Sūtrālaṅkāra*, Préface, p. vii.

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chords in Aśvaghoṣa and the Trivandrum author, raises no living echo in Kālidāsa and his successors. It would, therefore, seem unreasonable to separate the first two by any long period of interval. On the other hand, every consideration, so far, tends to place them both in the second or third century A.D.

It is easier now to deal with the last theory, of Gaṇapati, that the date of these works is about the fourth century B.C., and that their author is the Bhāsa mentioned by Kālidāsa.

The first part of his theory is disproved by even a partial examination of the internal evidence, i.e. of the Prākṛts, as shown above. The second part raises two questions: (1) What possible connexion is there between Bhāsa and the Trivandrum group? (2) Does the traditional account of Bhāsa suit the Trivandrum author?

(1) It has been demonstrated by Gaṇapati in his introduction to the *Svapnavāsavadattā*, pp. ii–xx, and summarized by Max Lindenau[1] in his *Bhāsa-Studien*, that the thirteen dramas (and the fragment of a fourteenth) are composed by the same author. One of them is the *Svapnavāsavadattā*. In one reading, it is *Svapnanāṭaka*, in another *Vāsavadattā*, the full name evidently being *Svapnavāsavadattā*. Abhinavagupta, the tenth century commentator of Bharata and Ānandavardhana speaks of one *Svapnavāsavadattā* as the work of Bhāsa. Rājaśekhara (*c.* A.D. 900) mentions Bhāsa as the author of *Svapnavāsavadattā*, and alludes to its conflagration-motive.[2] The Trivandrum *Svapnavāsavadattā* agrees with this, both as to the name and the characteristic detail. Hence the author is claimed to be the same, viz. Bhāsa. But it is composed by the same author as the twelve others. Therefore the whole Trivandrum series must be attributed to Bhāsa.

(2) Can the Trivandrum author be the Bhāsa mentioned by Kālidāsa and others? To ascertain this one has to apply to

[1] Max Lindenau, *Bhāsa-Studien*, Leipzig, 1918, pp. 7–8.

[2] Rājaśekhara's *Sūktimuktāvatī*.

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him the epithets and qualifications traditionally extant about Bhāsa. These are mainly four : (i) " he who gained fame by making the director begin the play ;[1] (ii) " friend of fire " ; (iii) " the laugh of poetry " ; and (iv) " ancient ".

(i) The first has already been discussed above, where it has been shown how the Trivandrum author is the only dramatist now known who exemplifies this reform prior to Kālidāsa. Peterson's [2] doubt whether this qualifying epithet marking that peculiar characteristic of Bhāsa which appealed to Bāṇa (seventh century A.D.) has any precise value at all is interesting but gratuitous.

(ii) Vākpati, in his *Gauḍavaho* [3] (A.D. 700), v. 800, finds pleasure, amongst other poets, in Bhāsa, " the friend of fire " (*Jalaṇanitte*). The current view [4] is extremely superficial. Why should he be called so simply because he introduces a conflagration scene ? Harṣa [5] (seventh century) introduces the same in *Ratnāvalī*, Act iv. Lévi's [6] suggestion that Harṣa borrowed from Bhāsa is a mere assumption. The credit for the conflagration-motive lies neither with Harṣa nor Bhāsa, but with Bṛhatkathā. The episode is taken bodily out of *Kathāsaritsāgara*,[7] chap. xvi. Baston [8] and Suali [9] are right in emphasizing that " the differences are of little importance ", and they do not entitle either to be called a " friend of fire ". The real explanation is furnished by the Trivandrum author. He introduces fire—not in any allegorical

[1] Bāṇa, *Harṣacarita*, v, 15.
[2] Peterson, *Report on Search for MSS.*, 1882-3, p. 117.
[3] S. P. Paṇḍit, *Gauḍavaho*, v, 800.
[4] *The Times Literary Supplement*, December 9, 1920, p. 818.
[5] *Ratnāvalī*, published by the Committee of Public Instruction, Calcutta, 1832, p. 98 ; cf. also *Vāsavadattā*, translated by L. H. Gray, New York, 1913, Introd. 1.
[6] Sylvain Lévi, *Le Théâtre Indien*, 1890, p. 158.
[7] Hermann Brockhaus, *Kathāsaritsāgara. Drittes Buch. Taraṅga*, xvi, p. 211, and English translation (C. H. Tawney), vol. i, bk. iii, ch. xvi, p. 109, śl. 14.
[8] Albert Baston, *Vāsavadattā*, 1914, p. 17.
[9] M. Suali, " I drammi di Bhāsa " : *Giornale della Societa Asiatica Italiana*, vol. xxv, p. 111 f.

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form, but as the god of fire himself—at every possible opportunity. In twelve[1] out of thirteen dramas there are direct references to Fire. Nay, he not only introduces Fire but often calls him by the very name with which he is associated in the verse quoted, viz. *Jalaṇamitte*, i.e. friend of Fire called *Jalaṇa* (Burner).[2] There is no other author to whom this epithet could be applied with similar significance.

(iii) Jayadeva, the author of *Prasannarāghava*, places before Kālidāsa, Bhāsa "the laugh (*hāsa*) of poetry". Genuine wit is a rarity in the classical dramas. The *Vidūṣaka's* fondness for food, and comic distortions of words, elsewhere, however admirable in themselves, are no wit, but mere attempts at such and, as Macdonell[3] remarks, "not of a high order." The reason is not far to seek. The *Vidūṣaka* as a renegade Brāhmaṇa, *mahābrāhmaṇa*, is not allowed to be decent even in witticism. The puns, however, are the distortions of natural hilarity forced into a mask of clammy convention. For wit, one has to look back. The Trivandrum author

[1] The only exception *Cārudatta*.

[2] *Abhi.*, pp. 70, 71, etc.; *Dūtagha.*, p. 63; *Ūrubha.*, p. 107, etc. Other references to Fire:—I: *Pañca.* (1) *havirdhūmaiḥ.*, etc., p. 2; (2) *tripto'gniḥ*, etc., p. 2; (3) *eṣā dīptaika*, etc., p. 3; (4) *agniragni*, etc., p. 3; (5) *Śakaṭī*, etc., p. 3; (6) *etāṁcakra*, etc., p. 3; (7) *valmīkamūlāt*, etc., p. 4; (8) *dahyamānasya*, etc., p. 4; (9) *Śuṣkena*, etc., p. 4; (10) *vanaṁ*, etc., p. 4; (11) *gato*, etc., p. 4; (12) *etadagner*, etc., p. 4; (13) *srugbhāṇḍa*, etc., p. 5; (14) *avanata*, etc., p. 5. II: *Avimā*, (1) *iṣṭaṁ*, etc., p. 5; (2) *dagdhāḥ*, etc., p. 60; (3) *tavāyaṁ*, etc., p. 105. III: *Bālaca.* (1) *vahnir*, etc., p. 33; (2) *roṣeṇa*, etc., p. 52; (3) *catuḥsāgara*, etc., p. 52. IV: *Svapna.* (1) *tatastasmin*, etc., pp. 11–12. V: *Pratijñā.* (1) *kāṣṭhādagnir*, etc., p. 23; (2) *agniṭ*, etc., p. 34; (3) *agnim*, etc., p. 67. VI: *Madhyama.* (1) *huta*, etc., p. 3; (2) *rakśasā*, etc., p. 7; (3) *yathā*, etc., p. 25. VII: *Ūrubha.* (1) *prāṇāgni*, etc., p. 88; (2) *vaira*, etc., p. 89; (3) *ādīptā*, etc., p. 99; (4) *vahnitvaṁ*, etc., p. 104; (5) *jvalantaṁ*, etc., p. 167; (6) *sadahanā*, etc., p. 110. VIII: *Abhi.* (1) *eṣa*, etc., p. 30; (2) *hutāśanaṁ*, etc., p. 41; (3) *jvalanaṁ*, etc., p. 70; (4) *jvalanād*, etc., p. 71; (5) *jvalato*, etc., p. 71; (6) *ayaṁ*, etc., pp. 72–3. IX: (1) *jvalano*, etc., p. 31. X: (1) *vahneḥ*, etc., p. 39; (2) *bhīmasya*, etc., p. 34. XI: *karṇa.* (1) *roṣānalo*, etc., p. 76. XII: *Dūtagha.* (1) *pañcā*, etc., p. 52; (2) *pṛcchāgniṁ*, etc., p. 60; (3) *aprāpta*, etc., p. 63; (4) *agnir*, etc., p. 65.

[3] A. A. Macdonell, *Sanskrit Literature*, p. 350.

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offers a strong relief. As an exponent of humour—both boisterous (cf. *Pratijñā*, pp. 59–61, Act. iv) and quiet (cf. *Pratimā*, p. 13, Act i, *Madhyama*, p. 22)—he pre-eminently deserves the title of "the laugh of poetry". The first verse, mistakenly quoted by Lévi [1] as an illustration of Bhāsa's wit, is in reality a confirmation of anthological inaccuracy. His definition of *hāsa* or laugh of poetry, as the play of alliteration,[2] is unsatisfactory. An alliteration is more of an artificial grimace (*prahāsa*) than a graceful laugh (*hāsa*). Lévi's meaning would suit the author of *Kādambarī* or Jayadeva much better. But if it means delightful wit, any number could be instanced from the Trivandrum series in support of its claim to the title.

(iv) In his introduction to *Mālavikā*,[3] Kālidāsa speaks of Bhāsa as "ancient" (purāṇa). Kālidāsa lived in the fifth century A.D. The Trivandrum author has been assigned (see above) to the second and third century A.D. It is quite natural for the former to mention a poet of the second or third century A.D. as "ancient". More so, when the latter's success and fame had stood the test of two centuries, amid the exuberance of contemporary and succeeding ventures, which found their consummation in the maturity of Kālidāsa, who represents not the springtime but the ripe autumn of classical glory.

There is only one objection left, Vallabhadeva's *Subhāṣitāvalī*,[4] *Śārṅgadharapaddhati*,[5] *Hariharāvalī*,[6] etc., profess to quote about ten stanzas from Bhāsa. How is it that none of the verses recorded in those anthologies as Bhāsa's occurs in the books under discussion? The difficulty is more apparent than real. Firstly, the anthologies are very far from being accurate; one particular verse is ascribed by

[1] Sylvain Lévi, *Le Théâtre Indien*, 1890, p. 159.
[2] Ibid., 1890, p. 159.
[3] F. Bollensen, *Mālavikā und Agnimitra*, pp. 3–4.
[4] *Subhāṣitāvalī*, 1286, 1353, 1619, 1628, 1821, 1994.
[5] *Sārṅgadharapaddhati*, 8, 17, quoted by Aufrecht.
[6] Peterson, *Report II*, p. 58, and *JRAS.* 1891, pp. 331–2.

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Kavīndravacanasamuccaya[1] to Lakṣmīdhara, the same being attributed, by two other anthologies, to Bhāsa. Secondly, there is no surety that the thirteen dramas discovered up till now represent the whole of Bhāsa's works. One instance would be sufficient to prove the point. *Buddhacarita* is, beyond doubt, composed by Aśvaghoṣa. Yet, excepting one solitary verse, bk. viii, 13, quoted by Rāyamukuṭa on the *Amarakoṣa* (1, 1, 1, 2) and Ujjvaladatta on the *Uṇādisūtras* (1, 156) (none of the two being an anthology)—there is no mention of it anywhere. To make the analogy complete several verses are quoted from Aśvaghoṣa in the anthology called *Subhāṣitāvalī*,[2] but none of them occurs in the poem preserved. The very same anthology again quotes verses as Bhāsa's which do not occur in the present series. The conclusion is the same in both cases.

Thus the present state of our knowledge places the author of the thirteen dramas definitely before Kālidāsa (fifth century A.D.), and just after or contemporary with Aśvaghoṣa second or third century A.D.), and admits of no serious objection to identifying him with the Bhāsa mentioned by Kālidāsa and his successors.

[1] Thomas, *Kavīndravacanasamuccaya*, p. 163.
[2] Peterson, *Subhāṣitāvalī*, pp. 8, 528, 529, 3100, 3142.

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A Loan-tablet dated in the Seventh Year of Saracos

By THEOPHILUS G. PINCHES

AS historical inscriptions of this, the last king of Assyria, are wanting, any additional light on his reign, however meagre that light may be, will probably be regarded as welcome, and this must be my excuse for the publication of this interesting but comparatively unimportant inscription.

Like his predecessors, Saracos (Sin-šar-iškun) called himself "the great king, the powerful king, the king of the world, the king of Assyria". He was also "the favourite of Aššur, Enlil, and Ninlil; the beloved of Merodach, and Zēr-panîtu^{m}, the choice of the heart's desire of Nebo and Merodach", etc. From the phrasing of this cylinder-inscription, it is clear that he regarded himself as much king of Babylon as of Assyria, and from the fact that the text came from Nineveh, it might be supposed that his sympathies were as much with the one country as with the other—indeed, as neighbouring nations, speaking the same language, this feeling would in no wise be unreasonable. Less than sixty years, however, had passed since the death of the somewhat ruthless Sennacherib, and this was probably too short a time to allow the Babylonians to forget what had happened during the earlier years of his reign and in the time of Aššur-bani-âpli—the "great and noble Asnapper", when the latter was in conflict with Šamaš-šum-ukîn (Saosduchinos), his brother. That they had the right to resist the Assyrian claim to over-lordship there is no doubt, and it is therefore certain that the action of the armies of Aššur-bani-apli, king of Assyria, aroused again Babylonian resentment against the dominion of the more northerly power.

There is, then, no doubt that Sin-šar-iškun, the last king of Assyria, made a great mistake in following in Aššur-bani-

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âpli's footsteps, and entrusting the leadership of his army, sent to suppress a rebellion in Babylonia, to Nabû-âpla-uṣur (Nabopolassar), instead of placing himself at the head of his troops to suppress the revolt. Ambitious, and probably of deep Babylonian sympathies, Nabopolassar turned his arms against his Assyrian master, and the fall of Assyria, the friendless oppressor and despoiler of nations, followed (607 B.C.). The story of this catastrophe is well known, and we await only the ancient cuneiform records for details and confirmation.

The text which I now translate records a loan of silver, and was drawn up at Erech. It is one of the inscriptions belonging to Mr. W. Harding Smith, and is numbered W. 67. Length 41 mm., height 30·5 mm.

OBVERSE

1. Išten manû kaspi ša $^{m.}$ Bêl-zēri âbli-šu ša . . . -a.
2. ina êli U-pa-qu âbil $^{m.}$ . . .
3. ul-tu ûmu tišû ša warah A[bi ina êli]
4. išten ma-ni-e êšrit šiqli kaspi ša šatti ina muḫḫi-šu
5. irab-bi bît $^{m.}$Âbla-a u bît $^{m.d.}$Nabû-šum-ukîn
6. mârē $^{pl.}$ ša $^{m.}$U-pa-qa maš-ka-nu ša $^{m.}$Bêl-zēri
7. ^{âwēlu} ra-šu-u ša-nam-ma a-na
8. êli ul i-šal-laṭ a-di
9. Bêl-zēri kaspa-šu i-šal-li-mu.

REVERSE

10. ^{âwēlu} Mu-kin-nu $^{m.}$Nadin-a âbil $^{m.d.}$Nergal-iddina
11. $^{m.d.}$Na-na-a-zalli abil $^{m.d.}$Nabû-bêl-îli
12. $^{m.}$Abla-a âbil $^{m.d.}$Bêl-ušallim
13. u ^{âwēlu} šangû $^{m.d.}$Maruduk-bêl-îli
14. âbli-šu ša $^{m.d.}$Nabû-zēr-iddina Uruk ^{ki} waraḫ Abi
15. ûmu tišû šattu sibittu $^{m.d.}$Sin-šarra-iš-kun
16. šâr mât Aš-šur ^{ki} ina e-dil bâbi.

TRANSLATION—OBVERSE.

1. 1 maneh of silver of Bêl-zērî son of . . .-a
2. unto Upaqu son of . . .

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3. From the 9th day of the month Ab upon
4. the 1 maneh 10 shekels of silver for the year upon him
5. it increases. The house of Ablaya, and the house of Nabû-šum-ukîn
6. sons of Upaqa, (are) the security of Bêl-zēri.
7. Another possessor ov-
8. er (them) shall not rule until
9. Bêl-zēri his silver shall have received.

REVERSE.

10. Witness: Nadinaya, son of Nergal-iddina;
11. Nanaa-zalli, son of Nabû-bêl-îli;
12. Ablaya, son of Bêl-ušallim;
13. and the scribe, Merodach-bêl-îli,
14. son of Nabû-zēr-iddina. Erech, month Ab,
15. day 9th, year 7th, Sin-šar-iškun,
16. king of Assyria. By the bolt of the gate.

FREE RENDERING.

1 maneh of silver belonging to Bêl-zēri son of [Ablay]a, due from Upaqu son of . . . From the 9th day of Ab (onwards) it increases unto him (at the rate of) 10 shekels per maneh yearly. The houses of Ablaya and Nabû-šum-ukîn, sons of Upaqu, are the security of Bêl-zēri. Another possessor shall have no right to them until Bêl-zēri shall have received his money.

In line 13 I have transcribed *sangu*, literally "priest", but *ṭup-šarru*, "scribe," is also possible, and perhaps the word intended.

As in line 14 stands for "son of", it is possible that in lines 1, 2, 10, 11, and 12 stands, as in later documents, for "descendant of", but there is doubt whether any distinction between these two expressions was made so early as 607 B.C.

Though somewhat early, this text is couched in the usual form. Noteworthy points are the high rate of interest, $16\frac{2}{3}$ per cent, and the fact that the borrower's two sons are

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mentioned as securities—if their father failed to repay the money they would find themselves homeless—that is, unless they possessed more than one house.

In line 5 we have the ideograph with the meaning of *rabû*, "to increase." This is a rare rendering of the character, and its use here is due to the fact that only two movements of the hand were needed to write it. When spelt out, so as to express the form in full—namely *i-rab-bi*—seventeen impressed wedges were necessary.

In line 6 the form *Upaqa* instead of *Upaqu* (line 2), or, better still, *Upaqi*, implies either that the case-endings were neglected, and *qu* and *qa* were pronounced as *q*, without any vowel; or else that the final *a* in line 6 may be due to Aramaic influence.

It is noteworthy that Sin-šar-iškun here bears the title of "king of Assyria" only. The omission of the words "king of Babylon" may be due to the fact that in later days Babylonia was regarded as part of Assyria, and designated by that name. But we have also to take into consideration that the scribe who wrote the tablet may not have wished to acknowledge the overlordship of Assyria.

Ina édil bábi. The contract was probably drawn up near the principal gate of Erech, or the gate where it was customary for men to meet for purposes of trade.

In his short but very noteworthy *Ancient History from the Monuments, Assyria* (S.P.C.K., 1875 or earlier), G. Smith places "Bel-zakir-iskun" (misprinted *-iskum*) before Assur-ebil-ili, the former with six, and the latter with thirteen (or fourteen) years (626–620 B.C. and 620–607 B.C.). These are the old conjectural readings of Sin-šar-iškun and Aššur-êtil-ilāni, son of Aššur-bani-âpli, respectively. We have, of course, to reverse the order, and also, apparently to give Saracos or Sin-šar-iškun an extra year. In any case the present contract proves that he ruled seven years at Babylon, the date of which would correspond roughly with the end of July, 606 B.C.

The identification of the gods of the Babylonian pantheon

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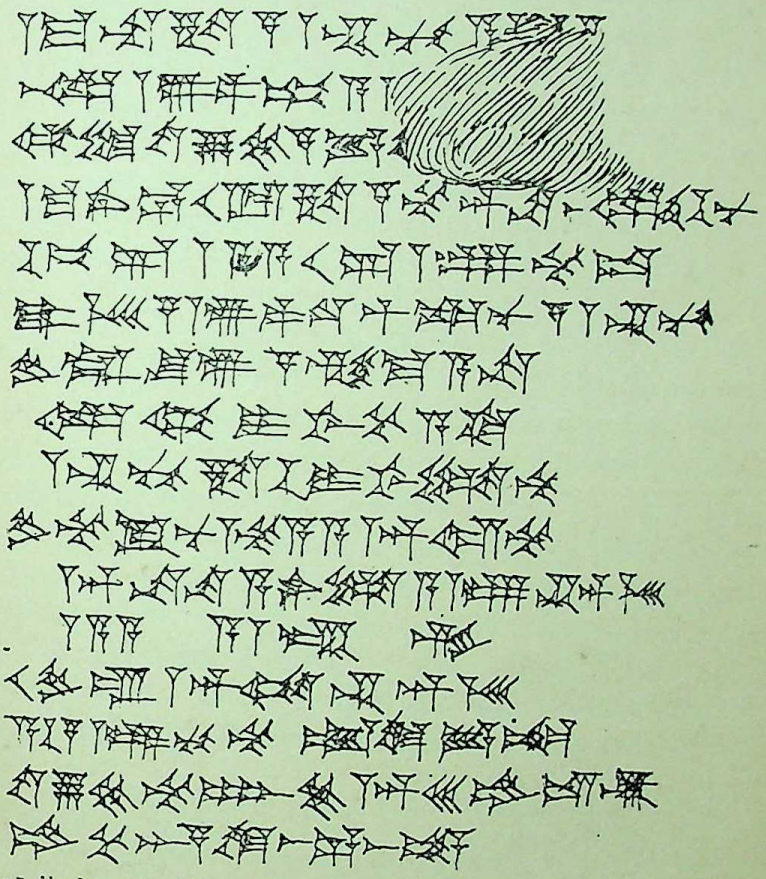
is illustrated by the names Nabû-šar-îli and Maruduk-šar-îli, "Nebo is king of the gods" and "Merodach is king of the gods". This accords with the indications of the "monotheistic tablet", on which the chief deities are identified with Merodach, the great head of the pantheon. It would also account for the popularity of the name of Nebo in Merodach's capital, as in many of the other great towns of Babylonia.

HARDING SMITH COLLECTION. W. 67.



Bêl-zēri's loan to Upaqu. Dated at Erech in the 7th year of Saracos, king of Assyria.

Note.—The two wedges on the edge of the break at the end of line 3 should be almost horizontal—they apparently form the beginning of the same character as occurs at the end of line 14.

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Three Assyrian Roots

By G. R. DRIVER, Magdalen College, Oxford

1. The Root and Meaning of *Kamtum*

IN the Annals of Ashurbanipal (Rassam Cylinder, col. iv, l. 85) for *attaddi ana nakamāti* Streck adopts the variant *at-ta-ad-di a-na ka-ma-a-ti*, which he translates "ich warf sie auf den Maueranger". He apparently follows Delitzsch (*Ass. Handw.*, p. 334, col. ii) and Muss-Arnolt (*Lexicon*, p. 399) in taking *kamâtu* as the plural of a noun *kamātu*, outer gate (Jensen, K.B. vi, 496), derived from *kamû*, to bind, to surround. Now there is here a variant reading *na-ka-ma-a-ti*, heaps, which gives the preferable sense "I cast them forth in heaps". It has therefore occurred to the writer that *kamâti* in our text is the plural not of *kamâtu* but of a word *kâmtum*.[1] This I take to be derived from a root *kâmu*, to cover over, to heap up, which is found in some of the cognate languages (Arabic كَامَ I, covered; II, heaped up; كُومَةٌ heap; Syriac ܟܡܐ concealed). Thus *kâmâtu* in this passage would be an alternative, with the same meaning, for *nakamâti*, which may originally have been a gloss or scribal conjecture for the rare *kâmtum*.[2]

At the same time Professor Langdon has suggested to me that the derivation of *kamtum* from the root *kâmu*, which is not itself found in Assyrian, offers a solution

[1] For the spelling *kam-tum* (for *ka-am-tum* = *kâmtum*) compare *mar-tum* (for *mârtum*), K. 257, obv. 21, *qiš-tum* (for *qîštum*), V R. 33, col. vii, l. 4, etc. For the plural *ka-ma-a-ti*, from a hollow root, *na-ra-a-ti* (from *nârtu*), IV R. 22, 10/11, may be adduced as a parallel form.

[2] Professor Langdon thinks that *kâmu* may have been the original word for "to heap up", and that the verb *nakâmu*, of which the root does not occur in the cognate languages, is a denominative formed from the noun *nakamtu*, treasure, heap, which is properly a derivative from *kâmu*. The spelling *nakamtu* for *nakâmtu* would be parallel to *na-bar-tum* for *nabârtum* (see Muss-Arnolt, 639*a*).

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of its occurrence in several places in the omen-texts. In these passages *kamtum* occurs as some sign on the liver, foreboding disaster; the meaning would then be a "heap" or, as we should say, a "lump" or abnormal growth. The passages are as follows:—

(1) C.T. xx, pl. 41—

line 8. *kam-tum kar-tum*[1] | *da-ṣa-[tum]*
= a lump ? | trouble

The meaning then is that a lump on the liver is a prediction of trouble.

line 9. *kam-tum tarkat kapṣat*[2] ?
= a lump [which] is torn [or] ?

The interpretation of a damaged or atrophied lump is unfortunately lost.

line 10. *kam-tum ḫur-ru-ur-tum* | *kišitti(ti)gâti*
= a lump pierced | conquest of the hand

That is, a pierced[3] (or perhaps porous) lump signifies victory. The principle of divination illustrated by this omen is that a defect in an adverse omen means good

[1] The meaning of *kartum* is unknown; but can it not be taken from a root *kâru*, כור, signifying "roundness", from which I would derive the Hebrew כֶּר basket-saddle, כּוּר smelting-pot, the Arabic كُوَّرَة stove; wasps' or bees' nest, كَارَة bundle (from the verb كَارَ wound round), and the Syriac ܟܘܪܐ oven and ܟܘܪܢܐ beehive? The Assyrian *kârtum*, which would therefore mean "round lump", is to be regarded as an explanatory synonym of *kâmtum*, and the passage should then be rendered: "a lump, a round thing [on the liver signifies] trouble."

[2] The word *kapâṣu* is unknown and no cognate root has been traced. If *kap-ṣat* could be regarded as an error for *qap-ṣat*, its root might be found in the Arabic قَبَضَ grasped; contracted, shrivelled. Then the sense of the passage would be: "a lump [which] is torn or shrivelled [signifies] . . ." The substitution of *k* for *q* is very common in Assyrian texts.

[3] It is interesting to notice that Cicero (*de Div.* ii, 14, § 34) records that a cleft or fissure in the liver was regarded as a sign for which the augurs looked.

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fortune. A lump means disaster, whereas a blemish in the lump portends evil to the lump, that is, good fortune for the one who consults the liver.

line 11. *kam-tum ina eli kam-ti | kâmûtu-u-a kâmûtu-šu-nu ikammâ*

= a lump upon a lump | my prisoners will bind their prisoners.

This seems to indicate a reversal of misfortune and to be another example of the principles explained above.

(2) C.T. xx, pl. 44, l. 51.

In a list of signs on the liver there occur the words—

kam-tum bar-tum

= a lump [on the liver signifies] rebellion.

(3) A. Boissier, *Choix de textes relatifs à la divination*, p. 124—

šumma ina tarbaṣi imni kam-tum nâdat . . .

= if on the right "court" a lump be found (lit., placed) . . .

(4) Knudzton, *Gebete an den Sonnengott*, No. 92, l. 4—

[šumma] ina išid ṣêri ubân qablîti kam-tu nâdat . . .

= [if] at the base of the surface of the middle finger a lump be found (lit., placed), . . .

And No. 72, reverse, l. 6—

šumma ina qaqqad ni-ri kam-tum nâdat . . .

= if on the top of the (?) a lump be found (lit., placed), . . .

(5) Boissier, *Documents Assyriens relatifs aux présages*, p. 7, l. 26—

šumma eli-nu KAL iṣu kakku ša-kin-ma eliš innamir kam-tum . . .

= if a weapon be put above the *KAL* and above a lump appear, . . .

And p. 221, l. 14—

šumma ina ékal ubâni šittâ uṣurâti išteniš iṣrit-ma ina bi-ri-ši-na kam-tum nâdat . . .

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= if on the "palace" of the finger two markings together be marked and a lump be found (lit., placed) between them, . . .

In these passages also "lump" appears to be a suitable meaning for *kámtum*.

If this interpretation of *kâmtum* be accepted,[1] it would appear that the Babylonians looked for any abnormal growth on the liver in the same way as the Roman augurs searched for the presence of a "fissure" (*fissum*) or the absence of the "head" (*caput*) of the liver.

2. Note on the Root of *Šimêtan*

No root is given in the lexicons for the adverb *šimêtan*, at dusk. After removing the adverbial termination *-an*, there remains a feminine noun, *šimêtu*, of which the root probably ends in ע. It seems possible that the *m* stands for a *w*[2]; the root is then *šw'* (שׁוע), which corresponds exactly with the Arabic سَوْعٌ first part of the night (see Salmoné, *Arab. Dict.*, p. 382, col. i, *s.v.* ساع),[3] as the Assyrian *š* regularly becomes *s* in Arabic.

Besides *šimêtu* a variant *šimtu* occurs (e.g. V R. 39, 26 and 33), on the analogy of *birtu*, vision (from *barû*), and *zertu*, offspring (from *zarû*). The adverb *šimtan* is then formed in the same manner as *šimêtan*.

3. The Meaning of *Simkurru*

In the broken obelisk of Tiglath-Pileser I (K.B. i, p. 126; King, *Annals of the Kings of Assyria*, vol. i, p. 141)

[1] A different sense is given to the word by Jastrow, *Religion Babyloniens und Assyriens*, vol. ii, p. 312, n. 9.

[2] Compare Ass. *namâru*, to shine, with Arab. نَارَ (نور) shone, and Heb. נוּר (unused).

[3] Words from this root are common enough: e.g. Arab. سَاعَةٌ hour, سُوَيْعَةٌ moment; Syriac ܫܥܐ moment, hour; Eth. *sā'* and *sā'at*, hour, which is used, for example, in Psalm xc, 4, to translate "a watch in the night".

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is a list of animals captured or killed by the king; among them occurs the *simkurru*, for which the lexicons give no meaning (Del. 503*a*, "ein Thier des Feldes"; MA. 766*a*, some wild animal). In default of any other proposal, the writer suggests that "gyrfalcon" is the meaning, comparing it with the Arabic سُنْقُر gyrfalcon (Dozy, *Suppl.* 694*b*). The interpretation is supported by Sumerian, in which *SÍM* means "bird" and *KUR* "mountain". What bird would a sporting king like to bring down more than a "mountain-bird" such as the gyrfalcon? The omission of the determinative *iṣṣuru* is difficult, but it can be attributed either to the error of the scribe or to lack of space at the end of the line.

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Note on an apparently unique Manuscript History of the Safawi Dynasty of Persia

By EDWARD G. BROWNE

(WITH PLATE.)

IN my article on "The Persian Manuscripts of the late Sir Albert Houtum-Schindler, K.C.I.E.", published in the *JRAS.* of October, 1917, pp. 657–94, brief mention was made (on p. 672) of a book entitled *Silsilatu'n-Nasab-i-Ṣafawiyya*, on the genealogy and history of the Ṣafawís. I can find no notice of another copy, and as the work is of considerable interest and importance, I think that a somewhat fuller account of its scope and contents may be acceptable to students of Persian history.

The volume comprises 88 pp., which, excluding the wide margins, measure 17 × 9 cm. and contain fifteen lines each, the whole work probably consisting of some 20,000 words. It is written in a large and legible, though not very graceful, *ta'líq* hand, with rubrications in *naskh*, and is undated. The last date mentioned in the text is A.H. 1059 (A.D. 1649), not 1010/1601, as formerly stated; and the MS. was probably transcribed during the reign of Sháh Sulaymán (A.H. 1077–1105; A.D. 1667–94), for whom, as we learn from the preface (f. 4*b*), it was composed. It is, indeed, not unlikely that it is the original autograph copy, though there is no colophon to afford proof of this. The author gives his name (f. 4*a*) as Shaykh Ḥusayn ibn Shaykh Abdál-i-Záhidí, and was a descendant of Shaykh Záhid of Gílán,[1] the spiritual director of Shaykh Ṣafiyyu'd-Dín, from whom the Ṣafawí dynasty derives its title. There are five miniature paintings (on

[1] In the *Ta'rikh-i-'Álam-árá-yi-'Abbási* (composed in 1025/1616) this Shaykh's personal name is given as Ibráhím. Jámí (*Nafaḥát*, pp. 242–3) briefly mentions a saint called Ibráhím of Gílán (*al-Jílí*), but gives no particulars by which he can be identified. Shaykh Záhid, according to our author (f. 68*b*), died in Rajab, A.H. 700 (March–April, 1301), being then over eighty years of age.

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ff. 13*a*, 19*a*, 26*b*, 35*b*, and 80*a*) of persons and events described in the text, and these, if of no great artistic merit, are not devoid of a certain spirit and originality.

The work comprises a brief preface, including the doxology and dedication to Sháh Sulaymán (ff. 3*b*–5*b*); fourteen unnumbered sections (*faṣl*) dealing with the ancestors and descendants of Shaykh Ṣafiyyu'd-Dín down to the time of composition; and a conclusion (*khátima*) in three sections on the relations existing between Ṣafiyyu'd-Dín and his successors on the one hand and Shaykh Záhid of Gílán and his successors (of whom our author is one) on the other. The accounts of the ancestors of Ṣafiyyu'd-Dín on the one hand and of the kings who succeeded to the crown won by Sháh Isma'íl on the other are very meagre, and the bulk of the work (ff. 10*a*–52*a*) deals with the seven generations beginning with the former (A.D. 1252–1334), who gave to this Royal House its title of *Ṣafawí*, and ending with the latter (A.D. 1487–1523), who first attained the position and title of King. Both of these, as well as several intervening heads of the family, were poets, and the amount of their poetry (Persian, Turkish, and Gílakí) cited by our author constitutes one of the most noteworthy features of the book.

In this short article I do not propose to discuss the original historical sources of information about the Ṣafawís, but merely to describe briefly one source hitherto, so far as I know, unnoticed and unexplored. To this end I shall give a short analysis of each section of the work, leaving any general observations that I may have to make for the conclusion.

Analysis of Contents

Preface (*ff.* 3*b*–5*b*)

After a brief doxology, consisting of two lines of Arabic and three Persian quatrains, the author, Shaykh Ḥusayn ibn Shaykh Abdál-i-Záhidí, explains that his object in composing the present work is not to compete with the many able

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historians who have written of the Ṣafawís, but to discuss certain spiritual aspects of their lives hitherto unduly neglected. Having dedicated his work to the reigning king Sháh Sulaymán (A.H. 1077–1105; A.D. 1667–94), he gives its title as *Silsilatu'n-Nasab-i-Ṣafawiyya*, or the "Genealogical Tree of the Ṣafawís".

Section I (*ff.* 5*b*–9*b*)

This section treats of Shaykh Ṣafiyyu'd-Dín and his ancestors, his pedigree up to the Imám 'Alí ibn Abí Ṭálib being given as follows: Shaykh Ṣafiyyu'd-Dín Abu'l-Fatḥ Isḥáq ibn Shaykh Amínu'd-Dín Jibrá'íl ibn Quṭbu'd-Dín ibn Ṣáliḥ [1] ibn Muḥammad al-Ḥáfiẓ ibn 'Awaḍ al-Khawáṣṣ ibn Fírúzsháh-*i-Zarrín-kuláh* ("Gold-cap") ibn Muḥammad ibn Sharafsháh ibn Muḥammad ibn Ḥasan ibn Muḥammad ibn Ibráhím ibn Ja'far ibn Muḥammad ibn Isma'íl ibn Muḥammad ibn Sayyid Aḥmad al-A'rábí ibn [Abú Muḥammad] [2] Qásim ibn Abu'l-Qásim Ḥamza ibn Músá al-Káẓim ibn Ja'far aṣ-Ṣádiq ibn Muḥammad al-Báqir ibn 'Alí Zaynu'l-'Ábidín ibn al-Ḥusayn ibn 'Alí ibn Abí Ṭálib. Thus Shaykh Ṣafiyyu'd-Dín was the twenty-fifth in descent from 'Alí, the first Imám of the Shí'a, and the twentieth from Músá Káẓim, the seventh Imám, who, as we learn from al-Ya'qúbí's History (ed. Houtsma, vol. ii, p. 500), actually had a son named Ḥamza. The next ten or twelve links in the chain, including five Muḥammads with no other designation,

[1] This pedigree, not worth much so far as the middle links are concerned, occurs in much the same form in most histories which I have consulted. In the useful Turkish version of Munajjim-báshí's *Jámi'u'd-Duwal* (extending to 1083/1672) made by Aḥmad ibn Muḥammad Nadím for the Grand Wazír Dámád Ibráhím Páshá in 1132/1720, entitled *Ṣaḥá'ifu'l-Akhbár*, and printed at Constantinople in three volumes in 1285/1868–9, the only variants are the transposition of Ṣáliḥ and Quṭbu'd-Dín and the insertion between the latter and Muḥammad al-Ḥáfiẓ of Ṣaláḥu'd-Dín Rashíd, who, however, on a subsequent page (f. 6*b*) of our MS. is simply substituted for Ṣáliḥ, so that the same person apparently enters the pedigree in some of its forms under two different names.

[2] This *kunya* is added by Munajjim-báshí.

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appear to me very uncertain and incapable of verification, and Fírúzsháh-i-*Zarrín-kuláh* is the first ancestor of Shaykh Ṣafiyyu'd-Dín of whom our MS. speaks with any detail. He is said to have been entrusted with the government of Ardabíl, which thenceforth became the headquarters of the Ṣafawís, by a quite indefinite king of Persia only described as one of the sons of Ibráhím Adham, a well-known Ṣúfí saint who flourished in the eighth century of the Christian era. He established himself and finally died, after a wealthy and prosperous life, at Rangín, in Gílán, leaving to succeed him his son 'Awaḍ, who took up his abode in the village of Isfaranján, near Ardabíl. His son and successor, Muḥammad Ḥáfiẓ, is said to have been carried off by the *Jinn* at the age of seven and educated by them for seven years, when he suddenly reappeared knowing the *Qur'án* by heart (for which reason he was entitled *Ḥáfiẓ*) and well instructed in religious knowledge. He was succeeded by his son Ṣaláḥu'd-Dín Rashíd,[1] who lived the life of a farmer at Gilkhwárán, where his son Quṭbu'd-Dín Abú Báqí followed him. In his time the Georgians overran the district and killed several thousand Muslims, and Quṭbu'd-Dín fled with his family and his little son Amínu'd-Dín Jibrá'íl, then only a month old, to Ardabíl, where he hid them in a cellar. The Georgians invaded the house, but were kept at bay for a time by a gallant youth, who, seeing his death to be inevitable, succeeded in hurling a large earthen jar (*kandú*) over the entrance to the cellar so that it was concealed from the invaders. Quṭbu'd-Dín himself was wounded and left for dead by the Georgians, but was found in the morning by some men who had come to strip the slain, and who showed an unexpected humanity in binding up his wound so that he recovered and was able to rejoin his family. His grandson, the great Shaykh Ṣafiyyu'd-Dín, who was born during his lifetime, used to say, "When Quṭbu'd-Dín took me on his shoulder, I used to put my four fingers in the sword-wound

[1] Compare n. 1 at the foot of p. 397 *supra*.

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in his neck which the Georgians had inflicted on him." Amínu'd-Dín Jibrá'íl succeeded his father Quṭbu'd-Dín, and combined the activities of a successful farmer with the profession of a saintly life, wherein he was guided by Khwája Kamálu'd-Dín 'Arabsháh of Ardabíl. He married a lady named Dawlatí, who, in 650/1252–3, became the mother of Shaykh Ṣafiyyu'd-Dín. At the time of his birth Shams-i-Tabríz had been dead five years, Shaykh Muḥyi'd-Dín ibnu'l-'Arabí twelve years, and Najmu'd-Dín Kubrá thirty-two years. He was 22 years old when Jalálu'd-Dín Rúmí died, 41 years old when Sa'dí died, and 5 years old when Húlágú the Mongol conquered Persia. He was the fifth of a family of seven, three brothers (Muḥammad, Ṣaláḥu'd-Dín Rashíd, and Isma'íl) and a sister being older, and two brothers (Ya'qúb and Fakhru'd-Dín Yúsuf) being younger than himself. His father died when he was 6 years old. Amongst eminent mystics and saints contemporary with him were Amír 'Abdu'lláh Shírází, Shaykh Najíbu'd-Dín Buzghúsh,[1] 'Alá'u'd-Dawla Samnání, Shaykh Maḥmúd Shabistarí (author of the *Gulshan-i-Ráz*), and Shaykh Muḥammad Kajaḥí (?) of Tabríz.

Section II (*ff.* 9*b*–14*a*)

This section describes Ṣafiyyu'd-Dín's prolonged search for a satisfactory Spiritual Director, and his ultimate discovery of and acceptance by Shaykh Záhid of Gílán. Even as a child Ṣafí was of a serious disposition, not inclined to associate with other children or to take part in their games. He was attentive to his religious duties and used to see the angels like strange birds in the air, or sometimes as men, and to hold converse with and receive encouragement from the "Men of the Unseen" (*Rijálu'l-Ghayb*). Finding amongst the anchorites (*Gúsha-nishínán*) of Ardabíl no guide to satisfy him, and hearing the fame of Shaykh Najíbu'd-Dín Buzghúsh of Shíráz, he desired to go thither to visit him, but was for

[1] According to Jámí (*Nafaḥát*, pp. 546–8) he died in Sha'bán 678 (Dec., 1279).

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some time prevented by his mother. His elder brother Muḥammad had betaken himself to Fárs, where he had acquired much wealth by commerce, but was finally destroyed by the deadly wind known as the *samúm* on a journey between Shíráz and Hurmuz. The second brother, Ṣaláḥu'd-Dín Rashíd, went to Shíráz to wind up Muḥammad's affairs, became mayor (*kad-khudá*) of that city, and acquired much wealth; and, as his sojourn there was prolonged, Ṣafí finally obtained his mother's sanction to go thither and endeavour to bring him back. On his journey thither he pursued a slow and devious course, halting at Abhar, Qazwín, and every other town where he heard of some eminent saint, only to meet with disappointment. Finally he reached Shíráz, where he met with an honourable reception, only to learn that Shaykh Najíbu'd-Dín Buzghúsh was dead.[1] He frequented the society of *darwíshes* and met some seventy notable saints, including Shaykh Ruknu'd-Dín Bayḍáwí, and was ultimately referred for spiritual guidance to Amír 'Abdu'lláh, who told him that none could solve his difficulties save Shaykh Záhid of Gílán, whose personal appearance and abode (situated on the Caspian shore close to the sea, with the door facing towards the east) he described to him. So Ṣafí bade farewell to his *darwísh* friends at Shíráz, each of whom gave him some present, and, having vainly endeavoured to induce his brother to accompany him, set out for Ardabíl, where Shaykh Záhid had foretold his arrival to his disciples.

Section III (*ff.* 14*a*–26*a*)

This section, which concludes the account of Ṣafiyyu'd-Dín, opens with an account of his protracted search for Shaykh Záhid, which lasted four years. At the end of this time a relative of his named Muḥammad Ibráhímán of Gilkhwárán went to a village called Hilya-kirán in the Khánbalí district

[1] Since, as we have seen (p. 399, n. 1, *supra*), he died in 678/1279, Shaykh Ṣafí, who was born in 650/1252-3, must at this time have been at least 27 years of age, though our MS. (f. 11*a*, l. 11) describes him as only 20.

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of Gílán to buy rice. Now Shaykh Záhid had two wives, one of whom dwelt on the Caspian shore in the house described by Amír 'Abdu'lláh, and the other in this very village of Hilya-kirán, where also the Shaykh happened to be staying, surrounded by a number of his disciples. Muḥammad Ibráhímán was so much attracted by their appearance that he made his vows of repentance to the Shaykh, joined their ranks, and clothed himself in their apparel. While returning home he was overtaken by a violent snowstorm in one of the severest winters ever known in Gílán. His fellow-villagers came out to meet and help him, amongst them Ṣafí, who at once questioned him about his change of raiment, and was informed that it was the garb prescribed for his disciples by Shaykh-i-Záhid. Greatly excited, Ṣafí questioned him as to the Shaykh's appearance, and received a description which exactly tallied with that given him at Shíráz by the Amír 'Abdu'llah. In spite of the severity of the weather he insisted on setting out at once for Gílán, accompanied by a servant named Muḥammad Khalílán. His health suffered considerably from the exposure, and from the ceremonial ablutions with half-frozen water which he punctiliously observed. Every night he saw the vision of Shaykh Záhid clad in scarlet and green. It was in the month of Ramaḍán that he finally reached the Shaykh's village of Hilya-kirán, and, though the Shaykh was not accustomed to receive strangers at this time, he made an exception in Ṣafí's favour, after he had caused the room in which he was performing his devotions to be superheated, thus inducing a profuse perspiration in the neophyte and curing him of the chill which he had contracted on the journey. A detailed account is given of the meeting of the two, of Ṣafí's taking the vows at the Shaykh's hands, and of the honour accorded to him by the latter, who invested him with his own robes, lodged him in his own private apartments, and proclaimed to his other disciples the spiritual greatness of this last recruit to their ranks. Shaykh Záhid was at this time 60 years of age and

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Ṣafí 25,[1] and they remained companions for twenty-five years longer, when the Shaykh died. Ṣafí succeeded him as director of the order, which position he held for thirty-five years, finally dying at the same age as his predecessor, namely 85. The date of his death, as we learn from a subsequent page (f. 24*a*) was Monday, Muḥarram 12, 735 (September 12, 1334). The names of his four brothers are repeated,[2] and a description of his personal appearance is given, which is followed (ff. 19*a*–23*a*) by specimens of his verse-compositions in the Gílán dialect and in Persian. The former (all quatrains) are accompanied by prose paraphrases in Persian, in spite of which they are difficult to follow. Space only allows me to give the first of the dozen as a specimen :—

در بابِ کسرِ نفس و فروتنی می فرماید

صفّیم صافیم گنجان نمانیم، بدل درده رژم تن بی دوایم،
کس بهستی نبرده ره باویان، از[3] به نیستی چو یاران خاکِ پایم،

شرح، یعنی صفّیم که صاف دلم و دلیل و راه نمایندهٔ طالبانم بگنجهای اسرارِ حقّ با وجودِ آن همه بدل دردمند و بیچاره‌ام زیرا که هیچ کس بعُجْب و پندار راه بعالمِ وحدت نبرده و من از بی تعیّنی و فروتنی خاکِ پای درویشانم،

[1] This would place the meeting in 675/1276–7, when Ramaḍán fell in February, a fact which affords some corroboration of the account of severe cold.

[2] They have been already given on p. 399 *supra*.

[3] The use of *az* for *man* in certain Persian dialects is very interesting, for it appears to be derived from the Avestan *azem*, "I", not from the Old Persian *adam*, *manâ*.

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Of his Persian poetry, in which he adopts the *takhallus* of Ṣafí, four *ghazals*, one couplet, and the following quatrain testifying to his devotion to 'Alí are given :—

صاحب کَرَمی که صد خطا می بخشد، خوش باش صفی که جُرْمِ ما می بخشد،
آنرا که جَوی مهرِ علی در دلِ اوست، هرچند گُنه کند خدا می بخشد،

It is worth noting that no Turkish poems are ascribed to him as to his descendant Sháh Isma'íl.

Shaykh Ṣafiyyu'd-Dín had two wives who bore him children, Bíbí Fáṭima, the daughter of Shaykh Záhid, and the daughter of Akhí Sulaymán of Gilkhwárán. The former was the mother of Muḥyi'd-Dín, who predeceased his father in 724/1324; Ṣadru'd-Dín, who succeeded his father; and Abú Sa'íd. The latter bore him two sons, 'Alá'u'd-Dín and Sharafu'd-Dín, and a daughter whom he gave in marriage to Shaykh Shamsu'd-Dín, son of Shaykh Záhid, from which marriage the author's ancestors issued.

At the end of his life Shaykh Ṣafiyyu'd-Dín performed the pilgrimage to Mecca, having previously nominated his son Ṣadru'd-Dín as his successor. On his return he took to his bed, and died twelve days later on Monday, Muḥarram 12, A.H. 735 (September 12, 1334). His three brothers did not long survive him, so that Ṣadru'd-Dín became sole heir of the family. Here follows an account of the various customs and regulations of the order established by Shaykh Ṣafiyyu'd-Dín, whose reputation for sanctity finally reached so high a degree that disciples flocked to him from all quarters. Mawláná Shamsu'd-Dín Barníqí of Ardabíl related that he estimated the number of these who came to visit him along the road from Marágha and Tabríz only in the course of three months at 13,000, while Sayyid Jamálu'd-Dín, who was responsible for the distribution of food to the poor, mentioned one occasion when a thousand sheep were cooked for this purpose, and another when three thousand loaves of bread

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were distributed. On account of this hospitality Shaykh Ṣafí was entitled *Khalíl-i-'Ajam*, the "Persian Abraham".[1]

Section IV (*ff.* 26*a*–32*a*)

Shaykh Ṣadru'd-Dín, to whom this section is devoted, was born on the *'Ídu'l-Fiṭr* of the year A.H. 704 (April 27, 1305), four years after the death of his grandfather Shaykh Záhid, and died in 794/1392. His father Shaykh Ṣafí died when he was 31 years old, so that he controlled and directed the affairs of the order for fifty-nine years. He built and endowed the great Ṣafawí mosque or shrine (حظیرهٔ متبرّکهٔ صفویّه) at Ardabíl, to the cost of which his disciples, male and female, contributed. A short description of his personal appearance is followed by one of his Persian odes, in the last verse of which he gives his name :—

گرتو خواهی بشنوی سرِّ انا الحقّ هر زمان،

صدرِ دینِ بن صفی دایم دم از حقّ میزند،

Ṣadru'd-Dín had three sons, Khwája 'Alí, who succeeded him; Shaykh Shihábu'd-Dín, who died without issue; and Shaykh Jamálu'd-Dín, who left one daughter, Khán-záda Páshá, married to her cousin Shaykh Ibráhím (better known as Shaykh Sháh), the son and successor of Khwája 'Alí. His spiritual acumen was such that sometimes, when the disciples were at prayer, he would separate the shoes of the sincere and godly from those of the lukewarm and the doubting, to the great shame of the latter. His father, Shaykh Ṣafí, not only forbade him to do this, but in order to blunt his spiritual vision ordered that "doubtful" bread from the bazaars should be mingled with his food.

[1] Abraham's hospitality to strangers is celebrated in a well-known anecdote in the *Bústán* of Sa'dí, quoted in Forbes' *Persian Grammar* (pp. ٣٤-٣٥, 152–4 and 164–70).

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Amongst his disciples was the celebrated mystical poet Qásimu'l-Anwár, of whom I have spoken at some length in my *Persian Literature under Tartar Dominion* (pp. 473–486), here entitled *Sayyidu'l-'Ushsháq*, the "Lord of Lovers". On his arrival at Ardabíl he was recommended to perform an *arba'ín, chilla*, or forty days' ascetic observance, in which he should never allow his head to rest on the ground or abandon the standing position except during the prostrations prescribed in prayer. To secure this end, and to prevent sleep from overtaking him, he fastened a cord attached to the ceiling of his cell to the long lock of hair (*kákul*) on his head, and only loosened it at prayer-time. Thanks to these austerities he attained a high degree of sanctity and spiritual power, and saw the vision from which he earned his title *Qásimu'l-Anwár*, the "Apportioner of Lights", wherein he saw himself in the mosque of Ardabíl holding a great candle in his hand, from which he distributed to each of the disciples assembled round him a light proportionate to his merits and capacities. He subsequently gained many disciples in 'Iráq and Khurásán.[1] His verses on the death of Shaykh Ṣafí are quoted and translated in the volume of my *Literary History* (p. 474) mentioned at the beginning of this paragraph.

Here follows an account of the tyranny and punishment of Malik-i-Ashraf,[2] king of Persia, "noted for his injustice and wrong-doing," who, conceiving a great hatred for Shaykh Ṣadru'd-Dín, lured him to Tabríz and confined him for three months in the *'Imárat-i-Rashídiyya*, when, in consequence of an alarming dream, he released him, but later again attempted to capture him and compelled him to flee into Gílán. He also persecuted other holy and learned men, one

[1] Jámí, who devotes a long notice to him in the *Nafaḥát* (pp. 689–93), casts some doubt on his orthodoxy, and asserts that most of his disciples had discarded the restraints of Islám and entered the circle of communism and contempt for the Holy Law and Tradition. His death is placed in 837/1433–4.

[2] See d'Ohsson's *Hist. des Mongols*, vol. iv, pp. 740–1.

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of whom,[1] driven to take refuge in the Dasht-i-Qipcháq, preached so eloquently on the sufferings of God's saints in Persia that the ruler of that country, Jání Beg Khán,[2] deeply moved, determined to invade Persia and punish Malik-i-Ashraf. Entering Ádharbayján by the Bábu'l-Abwáb and Shírwán, he captured the tyrant near Tabríz and put him to death. He then wrote a friendly letter to Shaykh Ṣadru'd-Dín inviting him to come and see him. The meeting took place at Awján, where the Shaykh was most honourably received by Jání Beg, who caused title-deeds to be drawn up conferring on him and his disciples all the estates of which the revenues had formerly been enjoyed by their shrine at Ardabíl, and invoking curses on anyone who should alienate them.

Here follows an account of one of Ṣadru'd-Dín's miraculous achievements (*karámát*), of which a coloured illustration occurs on f. 26*b* of the manuscript. About the year 600/1203–4 the Georgians invaded and plundered Ádharbayján and Ardabíl, and carried off from the latter place the door of the principal mosque, which they placed in one of their churches, regarding it as one of their chief trophies. Ṣadru'd-Dín determined to recover and restore it, and set off for Georgia with two of his disciples to ask for its surrender. The ruler of Georgia said they might take it, but issued stringent orders that no means of transport should be placed at their disposal. Supported by Divine aid, and encouraged by the Shaykh, who walked bare-headed before them uttering pious ejaculations, the two disciples carried the great, heavy door stage by stage to Ardabíl, where it was still to be seen in our author's time. On this event a poet has said :—

[1] His name, according to d'Ohsson (*op. cit.*, p. 741), was the Qáḍí Muḥyi'd-Dín of Barda'a. See also Sir Henry Howorth's *History of the Mongols*, part ii, division i, pp. 178–9.

[2] He was the son of Uzbek Khán, a descendant of Bátú, and reigned from A.D. 1340 to 1357. See S. Lane-Poole's *Mohammadan Dynasties*, p. 230, and d'Ohsson and Howorth, *loc. cit.*

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بعهدِ خسروِ عادل جلال الدّین حسن،

که آسمانِ جلالست و آفتابِ مُبین،

بعونِ حقّ درِ مسجد بکَنَد و باز آورد،

پناه و ملجاء اسلام شیخ صدر الدّین،

Our author further narrates that when Ṣadru'd-Dín visited al-Madína the Prophet enjoined the attendants on his shrine in a dream to treat him on his arrival with the utmost respect and to present to him the Prophet's standard, one of their most precious relics. This they did, and the standard was accordingly taken to Ardabíl, where the Shaykh on his return nominated his son Khwája 'Alí as his successor, and shortly afterwards died and was buried beside his father.

Section V (*ff.* 32*a*–44*b*)

Khwája 'Alí succeeded his father Ṣadru'd-Dín in 794/1392 and continued as head or director of the order until his death on Tuesday, Rajab 18, 830 (May 15, 1427). He is buried at Quds-i-Khalíl (? Jerusalem), where he is known as "Sayyid 'Alí 'Ajam". Many miracles (*karámát*) are related of him, one of these being the stopping of the Dizful river as an admonition to the people of that city, whom in a vision the ninth Imám Muḥammad Taqí bade him convert from the errors into which they had fallen. As they laughed at his exhortations, he, by God's favour, caused two great rocks between which the river ran to come together and impede the flow of water for eleven days, until the stubborn Dizfulis "believed and accepted the commands of the Holy Law, abjured their infidelity and heresy, and confessed the saintship, vicegerency, and trusteehood (ولایت و خلافت و وصایت) of 'Alí ibn Abí Ṭálib".[1]

[1] This is perhaps the earliest sign of strong and decided Shí'a propagandism on the part of the Ṣafawís.

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His dealings with Tímúr-i-Lang (Tamerlane), whom he thrice encountered, are next recorded. When Tímúr was crossing the Oxus he accidentally dropped his whip, of which the handle was of crystal set with precious stones, into the water. He was greatly distressed, both on account of the actual loss and because it seemed to him an evil omen. Suddenly Khwája 'Alí (apparently in "astral form"—بولایت) appeared, plunged his hand into the river, and restored the whip to Tímúr, who conjured him to say who he was. "My name," he answered, "is Sayyid 'Alí; my abode is in several places; and you will see me again at Dizful and at Ardabíl." So saying he disappeared.

After conquering Khurásán, 'Iráq, and Fárs, Tímúr passed through Shúshtar and reached the bridge of Dizful, where his horse shied. This reminded him of the whip which he had dropped into the Oxus and of the saint's prediction, and he sent for Shams-i-Dihdár, lord of Dizful, and inquired of him whether there dwelt in the city a *darwísh* named Sayyid 'Alí. Shams-i-Dihdár replied in the affirmative, adding that he claimed to be the grandson of Shaykh Ṣafiyyu'd-Dín of Ardabíl, and to have accomplished the pilgrimage seven times. Tímúr at once dismounted and ordered Khwája 'Alí to be brought to him. He came with another *darwísh* named Bábá Ruknu'd-Dín Walí, the former holding in his hand two pieces of brick and the latter one, which three pieces of brick they flung to Tímúr, who asked for a fourth. "This is enough," replied Khwája 'Alí; "we have given you three corners of the world, ask no more, for it is not good." Then he continued, "In the land of Syria there are a number of people who boast that they are the children of those who conquered the Prophet's family, and who do not believe in the Prophet. They are called the Yazídí Kurds, and are the friends of Mu'áwiya (curses upon him!). Chastise them as they deserve, for we wear black garments in mourning for the Immaculate Imáms. Our next meeting will be at Ardabíl,

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and the sign between us and thee will be a cup of poison." So saying he departed.

After Tímúr had conquered Rúm (Asia Minor) he came to Ádharbáyján, bringing many captives, and thence to Ardabíl, where he sent for Khwája 'Alí, to whom he offered a cup of poison. Khwája 'Alí took and drank it, saying:—

مائیم سرپوش و مائیم زهر نوش،

Thereupon some of the *darwíshes* who accompanied him began to ejaculate the *dhikr*, and as their ecstasy rose Khwája 'Alí joined in the dance and was presently bathed in a perspiration which eliminated the poison from his system. Then Tímúr declared himself the devoted disciple of Khwája 'Alí, and gave him a number of his Turkish prisoners (*asírán-i-Rúm*), whom the Shaykh set free, assigning them dwellings near the shrine of the Shaykh of Ganja,[1] where their descendants, known as *Ṣúfiyán-i-Rúmlú*, still live. Tímúr also endowed Khwája 'Alí and his sons with many estates in Talwár, Qizil Úzan, Kamra near Iṣfahán, and Hamadán, but the transfer remained incomplete at his death and effective possession was not secured, though the title-deeds long afterwards fell into the hands of some of Sháh 'Abbás the Great's soldiers at the capture of a village near Balkh.

Another miracle of Khwája 'Alí concerns the conversion of a young winebibber who passed by his oratory carrying on his head a copper tray, which by the Shaykh's gaze was transmuted into gold:—

آن ظرف چون منظورِ نظرِ کیمیا اثر قدّس سرّه میشود

و مرض که در کان برو عارض شده بود ازو زایل می گردد

---

[1] درقرب مزار متبرّك شیخ گنجه بکول، I cannot understand the last word.

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و طلا می شود و ازین جهة است که انسانِ کامل را اکسیرِ اعظم و جامِ جهان نما و عیسی وقت می گویند،

The transmuted tray was handed over by the young man to the attendants of the shrine, who exchanged it for sheep, which they committed to the charge of the Íl-i-Khwája Chúpání, who yearly contribute from the flock thus acquired to the kitchen of the monastery.

Here follows, as usual, the personal description of the Shaykh, and a short account of his family. He had three sons, of whom the eldest was Shaykh Ja'far, noted for his exceptional learning, and represented in our author's time by Kalb Khán, Qásim Khán, Báqir Khán, Ibráhím Khán, Sulaymán Khán, Murád Khán, and Bayram Khán, all known as "Shaykh Ja'farí". The second son was Shaykh 'Abdu'r-Raḥmán, whose descendants live at Kaskar and Ardabíl, and are represented by Mírzá Ibráhím *mutawallí*, after whom this branch of the family is called Ibráhímiyán. The third son, who succeeded his father, was called Shaykh Ibráhím, but is better known as Shaykh Sháh.

Khwája 'Alí was a somewhat prolific poet, and the selection of his Persian *ghazals* and quatrains given by our author occupies 19 pages (ff. 36*b*–44*b*) and comprises 228 verses. In his odes he adopts the *takhallus* of 'Alí.

Section VI (*ff.* 45*a*–46*b*)

Shaykh Sháh survived his father for nineteen years, during which he was director of the order, and died in 851/1447–8. He had six sons, as follows:—

(1) Shaykh Abú Sa'íd, librarian of the shrine, who had two sons, Shaykh Ján Mírzá, father of 'Alí Beg and grandfather of Qará Khán and Mír Mírán; and Taqí Mírzá. Mír Mírán had three children, Muḥammad Ṣáliḥ, Maḥmúd Beg, the father of 'Abdu'l-Muṭṭalib, and a daughter who became

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lady superior of the female members of the order (فقیره باشی).

(2) Sayyid Aḥmad, who left no issue.

(3) Shaykh Báyazíd, some of whose descendants are enumerated.

(4) Khwája Ján Mírzá, called the "Second Shaykh Jamálu'd-Dín" after his maternal grandfather. His mother was Khán-záda Páshá, daughter of Shaykh Jamálu'd-Dín, son of Shaykh Ṣadru'd-Dín. Khwája Ján Mírzá had four sons, two of whom, Khwája Aḥmad and Khwája Asad, left no issue. The third, Khwája Ḥasan Beg, had six sons, enumerated in detail; and the fourth, Khwája Muḥammad, was also the ancestor of several persons eminent in later times.

(5) Shaykh Ibráhím Khwájagí, who left no issue.

(6) Shaykh Junayd, who succeeded his father as head of the order.

Section VII (*ff.* 46*b*–47*b*)

When Shaykh Junayd visited Diyár Bakr, the ruler of that country [Úzún] Ḥasan conceived a great affection and admiration for him and gave him his sister Khadíja Begum in marriage. She bore him Sulṭán Ḥaydar, while the mother of his other son, Khwája Muḥammad, was a Circassian slave-girl, whose progeny are enumerated at some length. Shaykh Junayd was finally killed in battle in the neighbourhood of Shírwán, and buried in a village called Quryál or Qarúyál.[1]

Section VIII (*ff.* 47*b*–48*a*)

Sulṭán Ḥaydar, like his father, found favour in the eyes of his uncle Úzún Ḥasan, who gave him his daughter Bakí Áqá[2] in marriage. She bore him three sons ere he was killed

[1] The latter form occurs in our MS., the former in the Turkish history of Munajjim-báshí (vol. iii, p. 181), which adds that he was fighting with Sulṭán Khalíl.

[2] Munajjim-báshí calls her 'Álam-sháh Begum.

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at the early age of 20 on Thursday, Rajab 20, 893 (June 30, 1488). His sons were taken captive and imprisoned for four years near Shíráz. Sháh Isma'íl, then only a child, escaped to Gílán, but his brothers were killed, and he became the chief representative of the house of Ṣafí and the founder of its temporal supremacy.

Section IX (*ff.* 48*a*–51*b*)

Isma'íl, who was born in 892/1487, is given the full royal title of *Shah-i-Jam-jáh-i-Jannat-bárgáh Murawwij-i-madhhab-i-A'imma-i-Ithná-'ashariyya* Sháh Isma'íl Bahádur Khán, "the King whose rank is as that of Jamshíd, whose Court is like Paradise, the Promoter of the Sect of the Twelve Imáms." He became king at the age of 13 in 905/1499–1500, 170 years after the death of his illustrious ancestor Shaykh Ṣafiyyu'd-Dín,[1] reigned for twenty-five years, and died in 930/1523–4. He composed much poetry in Persian and Turkish, using the *takhalluṣ*, or pen-name, of *Khaṭá'í*.[2] Selections from his Turkish poems only, amounting in all to eighty-seven verses, are here given (ff. 48*b*–51*b*).

Section X (*f.* 52*a*)

Sháh Ṭahmásp, the second Ṣafawí Sháh, was born in 919/1513–14, ascended the throne at the age of 11 in 930/1523–4, reigned for fifty-two lunar years, and died on Ṣafar 15, 982 (June 6, 1574).

Section XI (*f.* 52*a*)

Sháh 'Abbás the Great was born in 978/1570–1, succeeded his grandfather at the age of 18 in 996/1587–8, and died after a reign of forty-one years in 1038/1628–9.

Section XII (*f.* 52*a*–*b*)

Sháh Ṣafí succeeded his grandfather in 1038/1628–9, and died in 1052/1642–3 after a reign of thirteen years.

[1] In 735/1334. See p. 403 *supra*.

[2] Cf. Gibb's *Hist. of Ottoman Poetry*, vol. iii, p. 106; and V. Minorsky in the *Revue du Monde Musulman* for Sept.–Dec. 1920, p. 70, and n. 2, *ad calc.*

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Section XIII (*f.* 52*b*)

Sháh 'Abbás II was born in 1042/1632–3, succeeded to the throne at the age of 10 in 1052/1642–3, and reigned a little more than twenty-four years.

Section XIV (*ff.* 52*b*–53*a*)

Sulṭán Sulaymán, in whose reign our author wrote, came to the throne in 1077/1666–7. After uttering prayers for his long life and prosperity, the author excuses himself from giving any fuller account of the achievements of the Ṣafawí Sháhs on account of the multiplicity of good and detailed histories already existing, and so concludes the main portion of his work.

Conclusion (*ff.* 53*a*–88*a*)

The conclusion (*khátima*), in three sections, is entirely devoted to the glorification of the author's ancestor Shaykh Záhid of Gílán and his descendants, and to establishing and illustrating the high degree of honour which they at all times enjoyed with the Ṣafawís, both before and after their attainment of kingly state.

Section I (*ff.* 53*a*–68*b*)

This section deals entirely with the intimate relations existing between Shaykh Záhid and Shaykh Ṣafiyyu'd-Dín, and is illustrated by about a dozen anecdotes, many of which are on the authority of Shaykh Ṣadru'd-Dín. Most of these are of a thaumaturgical character, and include instances of telepathy, sympathetic pains, and prognostications of the honour and greatness to which the house of Ṣafí shall attain. Mention is incidentally made of several contemporary *darwíshes*, such as Shaykh Najíbu'd-Dín Buzghúsh of Shíráz, Faḍlún-i-Jabalí, Mawláná Táju'd-Dín, Jamálu'd-Dín, and Muwaffaqu'd-Dín. At the age of 70 Shaykh Záhid married a girl of 14, who bore him a son, Ḥájji Shamsu'd-Dín, and a daughter, Bíbí Fáṭima, whom he gave in marriage to Shaykh Ṣafí, and who was the mother of Ṣadru'd-Dín.[1] A long account of the death and burial of

[1] See p. 403 *supra*.

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Shaykh Záhid concludes this section, and a narrative of the dispute as to where he should be interred, whether at Gushtásfí, Júmáq-ábád in Múqán, or Siyáw-rúd. His death took place in Rajab, 700 (March–April, 1301). Both Shaykh Záhid and Shaykh Ṣafí are represented as making use of dialect: the former says (f. 53*b*) "*ankin bú*", explained as "*chunín báshad*" ("so let it be!"), while the latter (f. 59*a*) recites a "Fahlawí", or dialect, quatrain.

Section II (*ff.* 69*a*–74*b*)

This section treats of the affection and regard for the children of Shaykh Záhid shown by Shaykh Ṣafiyyu'd-Dín, especially to his brother-in-law Ḥájji Shamsu'd-Dín, to whom he gave in marriage a daughter born to him by another wife (not Bíbí Fáṭima, the sister of Shamsu'd-Dín). He also showed the greatest affection and respect for Shamsu'd-Dín's son Núru'd-Dín Ḥámid, and for the half-brothers of the latter (his own grandsons), Shaykh Ḥámid and Mu'ínu'd-Dín, who survived their father, as testified in a declaration (*wathíqa*, cited on ff. 70*b*–71*a* of the text) written and signed by Shaykh Ja'far ibn Khwája 'Alí ibn Ṣadru'd-Dín ibn Ṣafiyyu'd-Dín, and dated 945/1538–9. Here follows an anecdote of Shaykh Ṣafiyyu'd-Dín and Dimashq Khwája,[1] into which is introduced a pretty story about a gardener who, in return for a very luscious fruit which he presented to the king, is bidden to take what he will from the royal treasury as a reward, and selects a phial of rose-water, which he carries back to his garden and empties over the roots of the fruit-tree, meaning thereby that since he owed the king's favour to the fruit-tree, the reward should be conferred on it rather than on him. There are half a dozen anecdotes in this section, most of which are related on the authority of Shaykh Ṣadru'd-Dín.

Section III (*ff.* 74*b*–88*a*)

In this section the author, Shaykh Ḥusayn, son of Shaykh Abdál, son of Shaykh Amír-i-Záhidí, describes the favours

[1] He was put to death on Aug. 25, 1327, by Abú Sa'íd the Mongol.

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Shaykh Abdál Pír-záda, the author's father, presenting the captured horse of the Uzbek leader, Dín Muḥammad Khán, to Sháh 'Abbás the Great (MS. f. 80a).

To face p. 415.

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constantly shown to his family by Shaykh Ṣafiyyu'd-Dín and his descendants down to the time of writing. After the death of Ṣadru'd-Dín their fortunes varied until the time of Sultán Ḥaydar, who, by a deed which our author quotes *in extenso* (f. 77*a*), confirmed Quṭbu'd-Dín Abú Sa'íd, son of Rafí'u'd-Dín, son of Núru'd-Dín Ḥámid, son of Shamsu'd-Dín, son of Shaykh Záhid, in the possession of certain estates enjoyed by his ancestors. This document (*wathíqa*) is dated Rajab, 888 (August, 1843), and was in the handwriting of Sultán Ḥaydar himself. Sháh Isma'íl and his son and successor Sháh Ṭahmásp continued these favours to the contemporary members of the Záhidí family, Shaykh 'Abdu'l-Wahháb, Shaykh Sharíf, and Áqá Shaykh, and another deed signed by Ṭahmásp on the 25th of Jumáda ii, 966 (April 4, 1559) concerning these properties is quoted in full by the author (ff. 77*b*–78*b*). After this, however, the province of Shírwán was overrun by the "ill-omened Turks" (*Rúmiyya-i-Shúmiyya*), and misfortunes befel the Záhidí family, whose estates were seized and some of whom were slain. In the time of Sháh 'Abbás the Great, however, the author's father Shaykh Abdál ibn Shaykh Amír made an appeal to that powerful king for protection and consideration, to which the Sháh readily responded, saying, "*Shumá Pír-záda-i-má'íd*" ("You are the children of our *Pír*," or Spiritual Guide), whence the family received the title of *Pír-záda*. Shortly afterwards Shaykh Abdál greatly distinguished himself in the battle against Dín Muḥammad Khán and Báqí Khán the Uzbeks, unhorsing the former and presenting his horse to the Sháh, who was greatly pleased and appointed him custodian (*mutawallí*) of the shrine at Ardabíl. The text of the document confirming this appointment, and dated the end of Rabí' 1, 1009 (October 9, 1600), is given in full (ff. 81*a*–83*b*). The services rendered to the shrine by Shaykh Abdál Pír-záda are next enumerated under eighteen heads (ff. 84*b*–86*a*), and the text of a royal order (*Ḥukm*) acknowledging these services and dated Jumáda ii, 1010 (December, 1601) follows on f. 86*b*.

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Shaykh Abdál was succeeded on his death by his brother Shaykh Sharíf Beg, who held the office of custodian for eighteen years. The author, who describes himself as—

فقیر حقیر بی بضاعت و عاجز و ضعیف کم استطاعت

شیخ حسین ولدِ شیخ ابدال زاهدی

says that he himself from his youth had been attached to the Sháh's service, "making the dust of the royal steed the tutty of his ophthalmia-stricken eyes," until old age compelled him, after the conquest of Qandahár in 1059/1649, "to choose the corner of seclusion and occupy himself with prayers for the long life and prosperity of his Spiritual Guide and Exemplar" (*Murshid u Muqtadá*), to wit, the Sháh, who, he earnestly hopes, may succeed in once more obtaining possession of Baghdád.

Here ends the book, which, as we have seen, treats of the spiritual rather than the political character of the Ṣafawís, and hence devotes much more space to the history of the family before they attained to sovereign power than afterwards. Herein lies its importance; for the phenomena connected with the rise of this power, so momentous in the history of Persia and the neighbouring countries, are, as yet, by no means clear, but are evidently closely connected with several obscure religious movements involving sundry *darwísh* orders in Persia and Turkey. Significant indications are to be found in the recent writings of Dr. F. H. Babinger of Würzburg [1] and Mr. V. Minorsky [2] and in a very scholarly Turkish work by Kyüprülü-záda Muḥammad Fu'ád entitled *Ilk Mutaṣavvif-lar* ("the First Ṣúfís"), printed at Constantinople in 1919. One is tempted to see a very close

[1] *Schejch Bedr-ed-Dīn der Sohn des Richters von Simāw: ein Beitrag zur Geschichte der Sekten-Wesens im altosmanischen Reich* (Berlin and Leipzig, 1921), especially pp. 78 *et seqq.*

[2] *Note sur la Secte des Ahle-Haqq*, in the *Revue du Monde Musulman* for Sept.–Dec. 1920, pp. 19–97.

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analogy between the rise of the 'Abbásids in the eighth century and of the Ṣafawís in the fifteenth, the ground in both cases having been assiduously prepared by widespread politico-religious propaganda.

One further point must be emphasized in conclusion. When a dynasty has been firmly established, there is always a tendency on the part of its historians to endeavour to prove that its ancestors were in their day noble and great. About the importance of Shaykh Ṣafiyyu'd-Dín, from whom the Ṣafawí kings derive their descent and their name, there is, however, no doubt. Two proofs of his renown and influence may be adduced. The first is the existence of an enormous monograph of him in Persian compiled shortly after his death and entitled *Ṣafwatu's-Ṣafá*. There is a fine MS. of this work (**Add. 11,745**) in the British Museum, fully described by Rieu on pp. 345-6 of his *Persian Catalogue*, but, though cited in most histories of the Ṣafawís, it is very rare.[1] It was composed about 750/1350, some fifteen years after Shaykh Ṣafí's death, by Darwísh Tawakkul ibn Isma'íl, known as Ibnu'l-Bazzáz. That so extensive and detailed an account of the Shaykh and his miracles should have been composed by a contemporary may be taken as sufficient proof that even in his own day he enjoyed a great reputation.

The second proof is furnished by two letters of the great minister and historian of the Mongols, Rashídu'd-Dín Faḍlu'lláh, contained in the unique manuscript formerly belonging to Sir Albert Houtem Schindler, and now to myself.[2] Of the fifty-three letters contained in this collection, two (Nos. 45 and 49) are concerned with Shaykh Ṣafí. No. 45 is actually addressed to him, and contains particulars of allowances of food and money assigned to him from crown lands and from Rashíd's private estates on condition that

[1] There is another MS. in the Library of King's College, Cambridge, No. 87 of the Pote Collection.

[2] See the *JRAS.* for Oct. 1917, pp. 693–4, and my *Persian Literature under Tartar Dominion*, pp. 80-6.

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on the night of the Prophet's birthday he will entertain the notables of Ardabíl to a dinner, to be followed by religious music and dancing (*simá'*), and concluding with prayers for Rashíd. No. 49 is addressed by Rashíd to his son Mír Aḥmad, then governor of Ardabíl, enjoining him amongst other things to seek to please and propitiate Shaykh Ṣafí, and to win his favour by obeying him and offering him presents. Great must have been the influence and reputation of a saint whose favourable regards so powerful a minister was so eager to win.

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MISCELLANEOUS COMMUNICATIONS

NOTES ON THE PERSIAN CUNEIFORM INSCRIPTIONS

(1) There are some curious little discrepancies in King and Thompson's monumental work on the Inscriptions of Darius on the rock of Behistûn, with regard to the ninth epigraph, i.e. the words describing the figure of the Scythian king, the last of the pretenders, over whom Darius vaunts his triumph. In the first place, it is stated on p. xxxvi of the Introduction that this description is to be found in all the three versions, Persian, Susian, and Babylonian, but on p. 210 it is definitely asserted (and the accuracy of the statement seems to be beyond doubt) that the epigraph "referring to Skunkha is not represented in the Babylonian version". A rather more serious difference is to be found with respect to the name of the king, who is called Skunkha on pp. xxxvi and lxxiii of the Introduction, and on p. 210, as cited above, but on p. 91 is twice called "Skunka the Scythian". On the same page the cuneiform letters constituting the epigraph are transliterated thus: "Iyam Sku(n)ka hya Saka," which is translated "This is Skunka, the Scythian". The cuneiform character given in the text is, however, 𒌋𒌋𒐊, which is quite distinct from and could not be confused with 𒐊𒆠, the equivalent of *k*. It is noteworthy that Tolman in his *Guide to the Old Persian Inscriptions*, published 1893, gives "Iyam Saku(n)ka hya Saka" as the transliteration of this epigraph, though in his later *Ancient Persian Lexicon*, published in 1908, his reading is "Iyam Skuxa hya Saka", and in his autographed Cuneiform Supplement, published two years later, the letter transliterated by *x* is shown as being 𒌋𒌋𒐊 in the actual inscription.

It may be noted that King and Thompson's cuneiform text is by no means free from mistakes. Within five pages (pp. 49–53) I recently found the following three errors. On p. 49

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(col. iii, line 41) 𐎹 is given by mistake for 𐎹 (*i*) in the last syllable of the word *asabâribis*, the first form being really the equivalent of *d*. Similarly on p. 50 (col. iii, line 48) 𐎠, a form quite devoid of meaning, occurs instead of 𐎢 (*g*), as the second letter of the word *agarbâyâ*. Again on p. 53 (col. iii, line 62) the form 𐎱 (which is really a dental *s*) is to be found as a substitute for 𐎼 (*r*) in the word *kâram*. In these circumstances it could hardly be assumed as a certainty that the real reading on the rock is 𐎫 (*kh*) in the absence of further evidence. The Susian (Elamite) version does not help to settle the point. It reads "Hi Iškunka akka Sakka", but there does not appear to be any equivalent for *kh* in the Susian cuneiform, and we find *kh* either deaspirated into *k* or omitted altogether in the Susian equivalents of proper names, which begin in the Persian character with *kh*. For instance, Khšathrita, the name assumed by the pretender Fravartis (Pharortes), appears in the Susian epigraph as Šattarrita, and in the Elamite versions of inscriptions of Xerxes his name (Khšayaršan in the Persian versions) is represented as being Kšeršša. A strong argument for reading 𐎫 is that in line 28 of the short and mutilated fifth column of the Persian version this letter occurs, followed by the word *nâma* (name) in a passage in which there are two clear mentions and one probable mention of Scythia, and in which the context renders it likely that a reference is made to the capture of the king of Scythia. What, however, to my mind finally clinches the matter is that Rawlinson (*JRAS.* 1847) gives 𐎫, and this, in view of Rawlinson's care and accuracy, seems to leave no doubt that this is the correct reading.

(2) In two inscriptions of Artaxerxes found at Susa and Hamadan, the word *anahata* occurs twice (in the nominative and genitive cases in each inscription), and this word is apparently in each inscription, though the Susa inscription is badly mutilated, mentioned along with and between the names of the deities Ahura Mazda and Mithra. This word

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has been identified with the Avesta *anâhita* (undefiled), which occurs repeatedly in Yasna lxv as an epithet of Aredvi Sura, but its identity with the common modern Persian word ناهید (the name given to the planet Venus) does not appear to have been noticed, though the identity seems beyond doubt. The aphaeresis of "a" at the beginning of words, particularly before "n", is a common phenomenon, an instance being furnished by the name of the king نوشیروان, the first syllable of which represents the Avesta word *anaosha* (undying), which occurs in the Mihir Yasht (x–125).

R. P. DEWHURST.

THE ETYMOLOGY OF DARA-I-NŪR

The Valley of Dara-i-Nūr lies east-north-east of Kabul city, and is well known. But it has not often been visited by Englishmen. Apparently the fullest account of the valley is contained in the late Colonel H. C. Tanner's Notes on the Chugani and neighbouring tribes of Kafiristan, p. 278 of the *Proceedings of the Royal Geographical Society*, vol. iii, for 1881. The paper was read on April 11, 1881, and will be found in the new monthly series which has succeeded the *Proceedings*. It is No. 5 for May, 1882, and comes immediately after a paper on Lake Nyasa. It may also be found in Ac. 6170 of the B.M. Catalogue.

Reclus, and probably also Ritter, says that the words Dara-i-Nūr mean Valley of Noah, and this is probably correct, though how the Arabic Nūḥ (نوح) has been changed into Nūr is a little obscure. Probably it is due to some peculiarity of local pronunciation. In the Pushtū edition of the Pentateuch, published by the Bible Society, Noah is spelt according to the Arabic نوح. At all events, Colonel Tanner seems clear that Nūr stands for Noah, though he is doubtful about the place being called Dara by the inhabitants. He also states, p. 294, that on the summit of Kemel (Amrit or

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Ramkund) there is a small lake, and that on its shores there still rest, according to tradition, the petrified remains of Noah's Ark, and that on the plain of Laghmān below there is the tomb of Lamech, the father of Noah, and that in Nūr Dara there is Noah's tomb, and that there is also a place in the neighbourhood called Nūr Gal. Further, there was a Chugānī tribesman who helped him much who was called Ḥaẓrat Nūr, that is the Prophet Noah!

To this evidence we may add the fact that there is a well-known tribe in Eastern Afghanistan called the Nūrzai, which is described both in Elphinstone, vol. ii, and in Raverty's Notes. The famous Aḥmad Durānī belonged to this tribe, apparently, for he is called Nūrzai in Elphinstone. As most of the Afghan tribes have the affix *zai*, as being the offspring of a patriarch, it seems pretty certain that Nūrzai means "descendants of Noah". Perhaps some reader of the *JRAS.* may be able to clear up the point more fully.

H. BEVERIDGE.

January 28, 1921.

SITA'S PARENTAGE

I have more than once drawn attention to the fact that, in the Kāshmīrī version of the Rāmāyaṇa, Sītā is referred to as the daughter of Mandôdarī, the wife of her abductor, Rāvaṇa. It is hardly necessary to state that there is nothing of the kind in the Vālmīki Rāmāyaṇa, and I have long searched for some early authority for this surprising statement. Now, thanks to a passing reference in Rai Saheb Dineshchandra Sen's admirable lectures on *The Bengali Ramayanas*,[1] I have been able to trace a complete version of the legend to the Adbhuta Rāmāyaṇa. This work, it may be observed, is current in Kashmīr, where MSS. of it have been obtained.[2] The following is the story as told therein :—

Sarga vi, 1. Nārada, having been insulted by Lakṣmī's servants, curses her to be born on the earth as a Rākṣasī.

[1] p. 35. [2] See Bühler's *Report*, p. vii (No. 105).

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22. She accepts the curse, and agrees that, if a Rākṣasī drink a pitcher full of blood contributed little by little by forest Munis, she would become incarnate in that Rākṣasī's womb. In this way, though born of a Rākṣasī, she would not be of Rākṣasa blood.

viii, 2. The Rākṣaṣa Rāvaṇa by his austerities sets the whole universe on fire. Brahmā, by offering him a boon, induces him to cease from his austerities. Rāvaṇa chooses as his boon that it should not be possible for Dēvas, Asuras, Yakṣas, Piśācas, Nāgas, Rākṣasas, Vidyādharas, Kinnaras, or Apsarases to kill him. In consequence he conquers the whole world.

14. One day, Rāvaṇa, roaming in the Daṇḍaka forest, sees the Ṛṣis engaged in their fire sacrifices, and meditates on the fact that he has not yet conquered them. He does not wish to kill them, but, in token of conquest, with the tip of his arrow draws a little blood from each, and collects it in a pitcher.

19. It has happened that one of these Ṛṣis, Ghṛtsamada by name, the father of a hundred sons, has before this been asked by his wife for a daughter who should be an incarnation of Lakṣmī. With this object, he has day by day sprinkled milk from a wisp of kuśa grass, with certain mystic charms, into a pitcher, and, on the day of Rāvaṇa's arrival, he has duly set up the pitcher as usual, and has gone off into the forest. It happens that this is the very pitcher that Rāvaṇa takes up and fills with the Ṛṣis' blood. He takes it home, and gives it into the charge of his wife, Mandôdarī, telling her to take special care of it, as the contents are more deadly even than poison.

25. Rāvaṇa, having become all-powerful, neglects his wife, and wanders about the Himâlaya, Mēru, and the Vindhya, sporting with the daughters of the Dēvas, Dānavas, Yakṣas, and Gandharvas. Consumed by jealousy, Mandôdarī determines to put an end to her own life, and, in order to accomplish this in the most thorough manner possible, drinks the contents of the pitcher of Ṛṣis' blood, which Rāvaṇa has

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assured her is of so deadly a quality. Instead of dying, she finds that, owing to the pitcher having contained milk that has been dedicated to Lakṣmī, she has suddenly become enceinte. Dismayed at this happening when her husband has been away from her for a whole year, she hurries off to Kurukṣētra under pretence of making a pilgrimage. There, *garbhaṁ niṣkṛṣya*, she secretly buries the girl-babe in the ground, and, after bathing in the Sarasvatī, returns home with no one any the wiser.

36. Thither, in course of time, Janaka comes with his golden plough, ploughs up the babe, and, under the instructions of Sarasvatī, takes her home, cherishes her, and calls her name Sītā.

GEORGE A. GRIERSON.

CAMBERLEY.
April 12, 1921.

RAJASEKHARA AND THE HOME OF PAISACI

May I offer some considerations as to Professor Konow's remarks on pp. 244 ff. of the *Journal* for April, 1921, regarding Rājaśēkhara's account of the home of Paiśācī. These remarks contain two statements of fact which we may at once accept as correct. These are :—

1. Rājaśēkhara states that the Bhūtabhāṣā was favoured in the West of Central India.

2. According to Bāṇa, the Bṛhatkathā was written in Bhūtabhāṣā.

Professor Konow then makes an assumption that the Bhūtabhāṣā of Rājaśēkhara cannot have been anything but the same Bhūtabhāṣā as that referred to by Bāṇa.

If that assumption is correct, then his argument that Paiśācī—the language of the Bṛhatkathā—was a language familiar to the people of West Central India is inexpugnable. But is it correct ? If not, his whole argument falls to the ground.

Before discussing this point I must make my own position

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quite clear. From the first I have maintained that the *nidus* in India of the Paiśācī language—the tract where it was spoken in its purest form—was in the north-west of India, in Kēkaya and thereabouts. But, at the same time, I admitted that it was probable[1] that thence it spread to other parts of India, and that a variety, or dialectic form, of it may very well have been spoken in the Vindhya Hills, close to the very country mentioned by Rājaśēkhara. The difference between Professor Konow and myself is not so much as to where Paiśācī was spoken, but as to where was its *home*.

Let us now return to the question of Rājaśēkhara's and Bāṇa's Bhūtabhāṣās. We are at once confronted by a fact which has been hitherto much neglected by European students of Prakrit—that there were in India two different schools of Prakrit grammarians—an Eastern and a Western.[2] The former traces its descent from Vararuci, himself an Easterner, and among his followers were Kramadīśvara, Laṅkêśvara, Rāma-śarman (Tarkavāgīśa), and Mārkaṇḍēya. Amongst the famous writings of this school may be mentioned the *Kīrtilatā* of Vidyāpati Ṭhakur, the *Caryâcarya-viniścaya*, and, probably, the *Prākṛta-piṅgala*, not to mention the many plays composed by Eastern authors. The teaching of the Western school is based on the original of the so-called *Vālmīki Sūtras*, now extant only in a much expanded form. These were adopted, with their entire grammatical terminology (widely differing from that of the East) by writers such as Trivikrama, Lakṣmīdhara, and Siṁharāja.[3] Hēmacandra also followed their teaching, but employed the special terminology used by him for his Sanskrit grammar.

Even in the accounts of standard Prakrit there are differences between the two schools. For instance,

[1] Cf. *ZDMG.*, lxvi, p. 76.

[2] Owing to the importance of Hēmacandra's grammar, it is the Prakrit of the Western school that has attracted the attention of European scholars.

[3] Cf. Siṁharāja, xii, 42.

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Hēmacandra (ii, 209) denies the correctness of the rule laid down by Vararuci (ii, 7), Rāma-śarman (ii, 5), and Mārkaṇḍēya (ii, 7). In vi, 4, and on other occasions, Mārkaṇḍēya roundly accuses the western Rājaśēkhara of making mistakes in Prakrit. But the greatest contrasts are in the important rules dealing with *dhātv-ādēśas*. In his fourth chapter, Hēmacandra gives 927 Prakrit substitutes for Sanskrit verbal forms. In his eleventh chapter, and elsewhere, Mārkaṇḍēya gives 618. Yet only 222 are common to both, and of these, in 62 instances, the two grammarians differ in the Sanskrit translations given by them. Hēmacandra gives 705 ādēśas which are ignored by Mārkaṇḍēyā, and Markaṇḍēya gives 396 ādēśas which are ignored by Hēmacandra. We thus see that, even in regard to standard Prakrit, the two schools were at variance.

If we consider the dialects, the want of agreement is still more marked. I do not refer so much to Śaurasēnī, though the eastern grammarians, Rāma-śarman and Mārkaṇḍēya, treat it much more fully than does Hēmacandra or Trivikrama; but the eastern account of Māgadhī differs in important points of phonetics and accidence (Māgadhī being an eastern language) from that given by the Westerners. The Easterners describe a number of minor dialects and sub-dialects which are altogether omitted from consideration by the others. The Apabhraṁśa of Kramadīsvara, Rāma-śarman, and Mārkaṇḍēya departs widely from that of Hēmacandra and Trivikrama, and when we come to Paiśācī, we find two very different dialects described. Vararuci, Rāma-śarman,[1] and Mārkaṇḍēya all agree [2] in their accounts of a language which

[1] Kramadīśvara's grammar devotes only two sūtras to this language.

[2] The one exception is that Vararuci does not allow the hardening of sonants at the beginning of a word or in conjuncts, while the later writers do. It is curious that Hēmacandra evidently knew of this discrepancy in writing his very brief account of Cūlikāpaiśācika (iv, 327), i.e. of the Paiśācī of the Easterners, which he himself differentiates from his own Paiśācī (so also Trivikrama). Here both he and Trivikrama plainly refer to Vr. x, 3, and equally plainly, rightly or wrongly, misunderstand what is there said. Vr. says that sonants become surds

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they call "Paiśācī" or "Paiśācika", and which is not the same as the language described under that name by Trivikrama, Hēmacandra, Lakṣmīdhara, and Siṁharāja. These latter agree amongst themselves in describing *their* Paiśācī, and this is a dialect allied to that described by the Easterners, but not the same, and *it* may quite possibly have been spoken in Central India as Professor Konow maintains. But while no single one of them claims that what he describes is the language of the Bṛhatkathā, on the other hand, the Easterners claim their Paiśācī as the actual form of the language used in that work.

When the Easterners Rāma-śarman and Mārkaṇḍēya agree in placing the standard Paiśācī of the Bṛhatkathā in Kēkaya, they thus in no way contradict Rājaśēkhara, who places *his* Bhūtabhāsā in Central India. Professor Konow says that there must have been a different tradition about the Bṛhatkathā in Mārkaṇḍēya's time (from the tradition current in the time of Rājaśēkhara). Here I venture to differ from him. There *was* a difference of tradition, but it was about Paiśācī, and not about the Bṛhatkathā, and it was not a question of time, but of locality and school. The Easterners had one tradition about the Paiśācī of the North-West, and the Westerners had another tradition about the Paiśācī of Central India. The two traditions are parallel, not mutually contradictory.

We are now in a position to discuss Bāṇa's statement that the Bhūtabhāṣā was the language of the Bṛhatkathā. This is in exact accord with all the above. Bāṇa was an Easterner. He was born and brought up on the banks of the Sōn, and it can only have been the tradition of the Eastern school that formed the basis of his education. If, therefore, as was

ayujōr, i.e. when not forming part of a conjunct consonant. Hc. and Tr. both interpret the expression as meaning "not in the case of the root *yuj-*". From this it is plain that they read *ayuji* in their copies of Vararuci, and that they had not seen Bhāmaha's commentary. It is hardly necessary to point out that *ayuji* could also have the sense meant by Vr.

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undoubtedly the case, by "Bhūtabhāṣā" he meant "Paiśācī", he can have meant only the dialect called "Paiśācī" by the Easterners, so that it was in their Paiśācī—not in the Paiśācī of the Westerners—that according to him the Bṛhatkathā was composed. In this he agrees with Mārkaṇḍēya, who, under the head of Kēkaya Paiśācī, quotes a sentence from the Bṛhatkathā to illustrate a point in that dialect. It is worth noting that, although this sentence contains only two words, one of them (*kupaci* for *kvacit*) could not occur in the Paiśācī of the Westerners, whose account contains no provision for the hardening of *v* (or *b*) to *p*, as is specially provided for by all the Easterners from Vararuci to Mārkaṇḍēya. It may not be said that Mārkaṇḍēya's rules are late, and therefore untrustworthy; for they agree in all essential particulars not only with the statements of Rāmaśarman, but also with those of Vararuci, who was far older than Hēmacandra.

I therefore submit that it is not safe to assume that the Bhūtabhāṣā of the Western Rājaśēkhara is the same as the Bhūtabhāṣā of Bāṇa; and, this being the case, it by no means follows, from the statement of the former, that the Bṛhatkathā was written in a language spoken, or favoured, in West Central India.

GEORGE A. GRIERSON.

CAMBERLEY.
April 30, 1921.

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NOTICES OF BOOKS

DIE ALTPERSISCHE RELIGION UND DAS JUDENTUM. UNTERSCHIEDE UEBEREINSTIMMUNGEN UND GEGENSEITIGE BEEINFLUSSUNGEN. By Dr. J. SCHEFTELOWITZ. 14 × 7½, pp. viii, 240. Giessen: Alfred Toepelmann. 1920.

Ever since the discovery of the Avesta in the middle of the eighteenth century by Anquetil du Perron, it became evident that there existed a close similarity between Parsism and Judaism. Not only had they many ritual practices and ethical teachings in common, but the Demonology of Parsism seemed to agree very closely with many of the beliefs current among the Jews from the time of the Exile downwards. No less was this the case in some of the eschatological teachings, such as the life of the soul after death, resurrection, final judgment. The problem thus offered has attracted the attention of scholars, and has been the subject of many investigations, often with a contradictory result. Did Parsism borrow from Judaism, or was Judaism indebted to Parsism for these teachings, beliefs, and practices? Some found the origin in the Avesta and its later developments, others in the Bible and the natural organic development emanating from the Bible. Of course, much depended upon the date of the compilation of the Avesta and of the Gathas, and on the results of the so-called higher Biblical criticism which had assigned to the various books of the Bible and especially to the Pentateuch a much more recent origin than the time of Moses. For if the Pentateuch was only a few centuries older than the time of the Exile and the Avesta as old as the time claimed for Zaratustra, then, naturally, Judaism might have borrowed from Parsism. The late Professor Darmesteter, in his introduction to the English translation of the Avesta, came, however, to the conclusion that the latter book depended to a large extent on the Pentateuch, and that it had been

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deeply influenced by the Law of Moses and by Jewish traditions and practices. This view was hotly contested by others, especially as some of these beliefs have a distinct bearing on the Judaism of the first century, notably on the doctrine of Satan. The matter was therefore not allowed to rest, and the conclusions arrived at were far from convincing. It must be stated also that most of these writers drew their information from secondary sources. Very few, if any, went to the Iranic and Hebrew originals, and even then they were satisfied with using translations.

The author of the present book, however, whose competence in these literatures cannot be gainsaid, has subjected this problem to a very thorough investigation. He has gone to the originals, and has followed up every detail with such minuteness that he has left very little, if anything at all, for anyone to glean after him. As the title indicates, his investigation is of a threefold nature. He deals with the differences between the old Persian religion and Judaism, agreements between them, and mutual influence exercised upon one another. The matter is divided into two parts, of which the first contains the introduction, the fundamental differences between Judaism and Parsism, inasmuch as Zaratustra, unlike Moses, brings to his people new gods, and endows them with corporality, then the cult of the dead, furthermore dualism, and the introduction of magic into the service and into the prayer. And in the second part, divided up into twenty chapters, Dr. Scheftelowitz studies the parallel religious conceptions in Parsism and Judaism, such as demons, evil-eye, curse, charms, and conjurations, signs and omens, some similar myths, tales, and legends, e.g. the Fall of Man, the Flood, Joseph and the wife of Potiphar, the exposure of Moses, etc., precepts concerning purity of life, similarity in various sacrifices, firstlings, etc., kindness to animals in and about the house. He then discusses at length (chap. 11) the parallel fundamental conceptions between the two religions, such as the omnipresence and omniscience of the Divinity,

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who sustains the world and protects the pious. Similarity in prayer.

A special chapter is devoted to the Fravashis and the Protecting Angels. The eschatalogical questions are now treated under the following headings: belief in immortality, the fate of the soul immediately after death in the post-Exilic writings, life everlasting, the heavenly register and the weighing balance, the heavenly paradise and the garments of the blessed ones, resurrection. In chapter 19 the author discusses the borrowings of Parsism from Judaism, how much the former is indebted to the latter, and finally, how much both are indebted to Babylonian traditions especially as far as astrology is concerned.

The final conclusion to which Scheftelowitz arrives is that Judaism and Parsism have passed through an organic evolution; they are practically independent of one another, but in their evolution they have followed a parallel course which has led to similarities in both religions, although they have not directly borrowed to any large extent from one another, Judaism certainly less from Parsism than Parsism from Judaism; moreover, no trace of Parsism can be found in the whole of the Biblical writings. It will easily be seen from the above summary that Dr. Scheftelowitz has treated the subject exhaustively. He has drawn upon the original for all his proofs and arguments.

The present writer arrived at same conclusions in his article on Parsism and Judaism (*Hastings Cyclopedia of Religion and Ethics*). But he ventured to go one step further, for a new problem arises. Whence have both Parsism and post-Biblical Judaism borrowed some of those practices and beliefs which are so strikingly similar in both, and he suggested for both a common Babylonian origin. This was the common starting-point, but the development afterwards took a somewhat different course in Parsism and Judaism, hence the similarity and the dissimilarity. To the author of the book the thanks of all interested in the subject are due for the

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scholarly, masterly treatment and the lucid exposition based on a complete knowledge and use of the entire literature extant. An excellent index of subjects, as well as one of the authors referred to in the book, conclude the work, which, moreover, is beautifully printed, and under present circumstances at a very great sacrifice. M. GASTER.

DEAD TOWNS AND LIVING MEN, BEING PAGES FROM AN ANTIQUARY'S NOTEBOOK. By C. LEONARD WOOLLEY. 9 × 6, 236 pp. Humphrey Milford, Oxford Univ. Press. 1920.

A title apt to mislead the would-be reader, for happily this delightful book contains very little of what is dead, but much of what is alive. The antiquarian appears in a new light. He is thoroughly human; he lives in his present surroundings. We hear very little of diggings and finds, of inscriptions and monuments, but we hear very much and almost exclusively of the way in which these diggings have been undertaken of the men who worked at them, and of the way in which Mr. Woolley has been able to win their confidence and to enlist their hearty co-operation. The historic background is, of course, not wanting. Enough is told to make us understand the charm of the places, and here and there a sketch of the life that once flowed in the cities now declared dead; a glimpse into the past is granted to the reader sufficient to captivate and interest him in the quaint anecdotes in the comings and the goings of the men with whom Mr. Woolley worked. We get here at first hand an insight into the character of the Arabs, working on the plains of Mesopotamia, of the Fellahin in Egypt, and also of the workmen in Italy. The characters of these men stand out boldly, their virtues and defects, and their human weaknesses.

We learn to understand how easily these people can be managed by anyone who enters their peculiar inner life and fathoms skilfully and sympathetically their psychology.

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Mr. Woolley rightly deprecates the attempts of introducing what is called Western civilization among these primitive folk. He rose in their estimation by refusing to allow one of these Arabs to strut about in a waistcoat and in high boots, but insisting on his wearing the original garb.

Mr. Woolley gives us also a sketch of the bureaucratic Turk, his corruption, his avarice, and the way in which many of these have contributed to plunge the peoples under their rule in great misery. But what would one say of a British "effendi" who, when the Governor refuses to grant him permission to excavate in the Turk's country, is pressed to do so by the decisive argument of a revolver put at the head of the Governor, or who quashed legal proceedings, however farcical, by the same argument of the revolver levelled at the judge, as Mr. Woolley has done. The judgment would not be very favourable to the British "effendi". Mr. Woolley has the courage of telling the story. Yet let it not be forgotten that the Turkish administration has become what it is by the Greeks. When the Turks occupied Constantinople they entered then upon the full inheritance of the highly developed, corrupt, and vile Byzantine administration, which has ever since, through the activity of the Phanar, poisoned the wells of that administration until it had brought about its destruction. Mr. Woolley describes in his vivid style the life during his excavations in Egypt, Italy, Carchemish, etc., especially his experiences in the latter place, and in Aleppo. The book has been written in captivity, but it shows very little trace of the durance vile in which he lived. How did he manage to save the large number (twenty-three) of excellent photos, which admirably illustrate the book, and are an additional charm to these attractive pages, some of which, probably, are the last representations of a world which is fast passing away?

M. GASTER.

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DODI VE-NECHDI (UNCLE AND NEPHEW). THE WORK OF BERACHYA HANAKDAN, now edited from MSS. at Munich and Oxford, with an English translation, introduction, etc., to which is added the first English translation from the Latin of Adelard of Bath's Quaestiones Naturales. By HERMANN GOLLANCZ, M.A., D.Litt. 14 × 7, pp. xxii, 220. Published by Humphrey Milford, Oxford Univ. Press. 1920.

In 1902 Dr. Gollancz published the Ethical Treatises of Berachya, and promised then to follow them up with the publication of another work by the same author. He has now fulfilled his promise in the present publication of the treatise called *Uncle and Nephew*. This work has been preserved in two different rescensions, a long one (the Munich MS.) and a short one (Bodleian and other MSS.). Both these texts have now been printed with an English translation. In an introduction of twenty-two pages Dr. Gollancz discusses some of the problems arising out of this work of Berachya, and these are manifold. The book belongs to the large class of the Elucidaria, so popular in the Middle Ages, manuals of instruction by way of questions and answers. But Berachya was not an independent author. He was rather more, a translator or a copyist. Already those who for the first time have drawn attention to this work, especially Steinschneider, have not failed to recognize an intimate connexion between this treatise and a similar compilation ascribed to Adelard of Bath. The first problem, therefore, to be dealt with was to establish the relation between Berachya and Adelard, to determine which of the two rescensions is more closely related to this supposed original, and whether Berachya had translated Adelard's work into Hebrew directly from the Latin original. The discrepancies, however, are so great that there cannot be a question of any direct dependence of Ber. upon Ad. In many chapters B.'s text is much more enlarged, and often of an entirely different character, nor is the same order of the chapters preserved.

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The first ten chapters of Ber. correspond more or less with some of the last chapters of Adelard. Did Berachya, who lived probably in Burgundy, know any Latin at all, or did he translate from a French version which had been made from Adelard's Latin text which would explain these differences? It would have been necessary also to consider more closely the manner of Berachya's literary activity, which could be deduced from his fables. These stand in close relation to the French fables of Marie de France. Moreover, there are French glosses in this very treatise, some of which are mentioned by Dr. Gollancz. But while he is prolix in the introduction about Adelard, his life and his literary activity, scarcely any attempt is made to answer the above questions. A comparative table is merely drawn up from which the reader can learn the relation between the Latin Adelard and the Hebrew Berachya, but which leaves the problem if anything more intricate. No detailed description is given of the two MSS., of their probable age and character, except the bare statement that the copyist of the Munich MSS. was a careless scribe, and probably also an ignorant man. Nor do we find here any comparison between the language of Berachya in the present work and that of the ethical treatises. No source is given nor any parallel to the various curious conceptions of astronomy, physical, natural science, etc., contained in this dialogue. Instead of this Dr. Gollancz gives us a translation of the Latin text of Adelard, which, of course, is a very welcome addition. There is one point more which required some elucidation, viz. which of the two versions is the first and which the second, and whether both go back to the same original or whether we have to assume that Berachya did the work twice, translating two different originals, especially as there are portions in the Bodleian text which are missing in the Munich, and many of the questions in the Bodleian MS. are answered somewhat differently, but one looks in vain even for any reference to such problems. Dr. Gollancz is quite satisfied with the few remarks contained in his Introduction. The question

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of date has also to be considered. Is *My Uncle and my Nephew* older than the other works of Berachya, and in what chronological order do the various works follow one another? This is an important question, as it bears on the philological character of the book, the language of which is peculiar and often very obscure. It is a pity Dr. Gollancz should have ignored all these questions, and should have been satisfied with a bare reference to this introduction, instead of giving full notes and explanations whenever the text or the translation demanded them. Instead of the bibliographical information given on p. xxii, other books should have been mentioned, such as Gerson ben Salomon's *Gate of Heaven*, instead of which Dr. Gollancz quotes *The Wars of the Lord*, the work of his son, Levi b. Gerson, evidently confusing one with the other. For astronomical information he might have referred to Isaack Israele's great astronomical work rather than to the incidental references in Yehuda Ha-Levi's *Kusari*.

But a greater disappointment awaits the reader who turns to the translation for the elucidation of the Hebrew text. Judged by this translation, Berachya's work is often nothing else but a mass of confused statements. It seems that the translator has often failed to grasp the real meaning of the text before him, and on some occasions, such as in chapter 19 and chapter 35 and elsewhere, sentences have remained untranslated without the reader being made aware of it. The passages are unquestionably obscure, but the translator should not have omitted to mention the fact. Not in a few passages he has clearly mistaken the original, e.g. in chapter 19, instead of translating "You see a hound running furiously in a thunderstorm and carried along the ground in excitement", it should be "You see a hound rushing along leaping furiously or sniffing the ground"; and in the same passage, instead of "seeking flight", it ought to be "in search or in flight". Or, again, in chapter 35, whence does the author get "I loved thy heart's reflections", whilst the text means "And my thoughts were with thee", etc. Or chapter 4

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of the Bodleian MS., the translation reads, "Man has the knowledge to recoil from the food he has once swallowed, that he spews it forth," whilst the real meaning of the text is, "Because a man can sicken at the sight of food he vomits that which he has swallowed." These few specimens, which can easily be multiplied, must suffice. The book is also not free from printing mistakes, such as on p. xx two mistakes in the Hebrew. Correct "boar" for "bear" on p. 73, etc. It is greatly to be regretted that a book of this kind, which might have been an important contribution to the history of the propagation among the Jews of the Middle Ages of some of the mediaeval popular law, should have been published with so little care.

SOME SOUTH INDIAN VILLAGES. Vol. I of Economic Studies of the University of Madras. Edited by Professor GILBERT SLATER. $9\frac{1}{2} \times 6$, 400 pp. Oxford Univ. Press. 1918.

This volume consists of studies of the economic situation in individual villages, carried out by students of the Madras University under the guidance of Professor Slater, who contributes an introduction and some concluding observations. It may be criticized either as an achievement or as a symptom. From the former point of view the value of the individual studies is slight; they are inevitably immature, or even crude; one can often see where the writers have gone astray, and in a few cases one realizes the extent of the injury done to young India by the perverted notions of history which have been inculcated so industriously during the last twenty years. Professor Slater's own observations are, however, of real value, especially his study of the incidence of the land revenue.

As a symptom the book has considerable interest, for it shows that in at least one Indian university the study of economics is being conducted on rational lines. We may question the objective value of the students' observations,

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but we cannot doubt that the students themselves have benefited greatly by the work they have done: their thoughts may not in all cases be worthy of print, but we can see that they have been made to think, and in the circumstances that is no mean achievement. Discipline of the kind indicated in these studies will in due time give India the economists she needs so much.

W. H. M.

STUDIES IN MUGHAL INDIA. By JADUNATH SARKAR. 7 × 5, 313 pp. Cambridge: Heffer. Calcutta: Sarkar & Sons. 1919.

MUGHAL ADMINISTRATION. By JADUNATH SARKAR. 8 × 5½, 152 pp. London: Luzac. 1920.

Professor Sarkar's work has been noticed so recently in this Journal that we need do little more than record the appearance of these two volumes, the first a reprint of essays previously published, but enriched by many new ones, the second a course of lectures delivered before the University of Patna. In both we find the qualities which have given the author an assured position among Indian historical workers, intelligent use of primary sources, exemplary carefulness and restraint, and a just sense of perspective. One could argue about some particular statements on minor points, but to do so would require an amount of space out of all proportion to their importance, and it will suffice to commend the books to all students of the Mughal period, and to indicate two matters in which the *Lectures* could be improved, anticipating that a new edition of them will in due time be required.

The first of them relates to the revenue administration. Professor Sarkar passes over this subject lightly on the ground that it has been adequately treated by European writers, but his account of Aurangzeb's system contained in the *Studies* indicates many points which have not yet been fully explained, at least, in readily accessible books, and we should

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welcome a study of such matters as the rise in the standard revenue-rate from Akbar's one-third to Aurangzeb's one-half, the growth of cash-rents independent of the area cultivated in a particular year, and the method of valuing crop-assessments which succeeded to Akbar's inspiration of the *dihsala*. Information on such points is needed in order to link up the *Ain-i Akbari* with the revenue-system found at work by the English in the eighteenth century.

The second suggestion is that the practical working of the administration generally might be illustrated more copiously from the contemporary observations of the English and Dutch merchants. There is some risk that the lengthy quotations from instructions given to Mogul officials may tempt readers to believe that these instructions must have been followed in practice; a better estimate of the weight actually attached to them can be framed by readers familiar with such incidents as the Khan-Khanan's excess profits levy at Dacca in 1661, or Mirza Ali Akbar's extortion at Surat a few years before.

W. H. M.

CLAVIS CUNEORUM, Part 3. By G. HOWARDY. 4 × 8, pp. 111. Leipzig: Harrassowitz. 1918.

The third part of Dr. Howardy's *Clavis Cuneorum* was published in 1918, eleven years after the appearance of the first part, but owing to its publication in Germany it is only recently that it has come into the hands of English Assyriologists. It is a wonderful example of patient labour and research. The Assyrian ideographs, mostly in their compounded form, have been collected, transliterated, and translated into Latin, English, and German, in so far as they were known up to the date of publication, and the whole work is a model of lucid arrangement and compactness. Unfortunately it is still incomplete, and unless the author can find assistants I do not see how it can be finished in an ordinary

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lifetime. If complete it would be even more indispensable to the scholar than Brünnow's *Classified List* of cuneiform characters, and as it is no Assyriologist can afford to be without the three parts that have already appeared. Dr. Howardy, who is a Danish clergyman, has managed to find time in the midst of his clerical labours to ransack and examine the voluminous and widely scattered literature that has been published of late years on Assyrian philology and script; up to the beginning of the War, in fact, I can find no instance of omissions, and the interpretation of the Assyrian words is thoroughly up to date.

A. H. Sayce.

Zum Babylonischen Neujahrsfest II. By H. Zimmern. $14 \times 6\frac{1}{2}$, 250 pp. Leipzig: Trübner. 1918.

Among the cuneiform documents found by the German excavators at Kalah Shergat, the ancient Assur, some remarkable texts have been discovered which are of unusual importance for the theologians. One of them has been transliterated and translated by Professor Zimmern, together with an introduction and notes, and it is likely to excite a considerable amount of interest, if not of perturbation, in theological circles. It comes from the library of Assur, which was formed in the ninth century B.C., or perhaps earlier, but it is a copy of a much older Babylonian work.

It contains the stage-directions for a sort of miracle-play which was performed in the temple of Bel-Merodach at Babylon every New Year's Day. Bel was bound and brought before the tribunal which awaits mankind on the bank of the river of death. After being scourged or "wounded" he was condemned to death and led away to the prison-house of the cosmic "mountain". Along with him a malefactor was also led away to execution, while a second malefactor, if Professor Zimmern's translation is correct, was released. After the god had thus "descended into the prison-house, away from

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the sun and the light", the city was plunged in confusion (*ittapalkat*), while the clothes were stripped from the dead body of the god and laid before the divine queen of Erech. After this a goddess washed away "the blood of the heart", which had flowed from a wound in the side. The tomb or prison-house of Bel was now watched by a "son of Assur", his priestly followers wept and lamented for him, and a goddess sought his tomb. But eventually he rose again from the dead, and thus became the saviour who in the language of the early Sumerian hymns "raises the dead to life".

This extraordinary text is supplemented by one which was published by Dr. Pinches in the *Proceedings* of the Society of Biblical Archæology as far back as 1908, but is apparently unknown to Professor Zimmern. The text is exceedingly fragmentary, and at the time of publication it was impossible to understand it, and therefore to translate it satisfactorily. In the light of the tablet from Assur, however, it now becomes clear. It gives us, in fact, the wording of the miracle-play. We are told how, after the fetters of Bel Merodach had been made fast, "he descended into hell" (*iriddi kisukkis*), and there "the spirits who were in prison" (*ilâni tsabtutu*) "rejoiced to see him". The words of St. Peter (1 Pet. iii, 19), which have been quoted from some apocryphal writing, are a literal translation of the cuneiform text, and the preaching to the spirits is explained by the address of Merodach to Nergal and Enme-sarra which follows his entrance into Hades.

While Bel was in the prison-house of the tomb the beginning of the Creation Epic was recited by his followers at Babylon. The sixth tablet of the epic, relating to the creation of man, has now been recovered from one of the Assur tablets, and in this there is probably a reference to the descent of Bel into the underworld. Mankind, it is said, grew rebellious after their creation; the sanctuaries of the gods were destroyed and their worship neglected. Then comes a line which Professor Barton translates: "making a pit as a tomb in

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full splendour he (i.e. Bel-Merodach) went down into it", though the translation seems to me somewhat difficult to defend. The two next lines, however, are clear: "who (i.e. Merodach) with his weapon, the deluge (*abubu*), took captive the wicked, and saved from destruction the gods his fathers." It is noteworthy that the passage in the Epistle of St. Peter which mentions the descent into hell couples with it a reference to the deluge.

A. H. Sayce.

Hittite Seals, with particular reference to the Ashmolean Collection. By D. G. Hogarth. 13 × 9, 180 pp. Oxford: Clarendon Press. 1920.

The Ashmolean Museum at Oxford contains by far the largest and most important collection of Hittite seals in the world, and it is therefore fitting that the first scientific attempt to classify and explain them should be made by its learned and versatile Keeper. Unfortunately the War has delayed the publication of the book. It was already in the printers' hands in 1915, and since then much has occurred in the archæological as well as in the political world. Mr. Hogarth tells us that the numerous Hittite cylinders and stamp-seals added to the Ashmolean Collection since 1914 have increased it by more than fifty per cent, while the publication of so many of the Boghaz Keui and Assur cuneiform texts by the Berlin scholars has given us new and revolutionary views as regards the early history and art of Asia Minor. It is not surprising, therefore, that the author is contemplating the publication of a supplementary study.

But he has prepared the way for this in the present work, which is a very able and courageous endeavour to place the study of the so-called Hittite seals upon a scientific basis. The main outlines of the study have, I believe, been sketched in it once and for all; but much remains to be done, not only in the way of enlargement, but also of modification or correction

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of the details, and already our new knowledge necessitates both addition and correction.

"Hittite" seals include the seals of Northern Syria, together with all others of a cognate character. Indeed, it is still impossible to distinguish in many cases between what belongs to Asia Minor and what emanates from Northern Syria, or, rather, from the Semitic element in that part of the world. The recent discovery of M. Legrain of a missing portion of the Nippur dynastic tablets in the Philadelphia Museum has shown that as far back as the fourth dynasty before that of Akkad Babylonia was already governed by a Semitic dynasty of kings from the North Syrian city of Mari, 3 kilometres from the modern Dêr ez-Zor, and that the second dynasty before it came from Khawazi, which I should identify with the Biblical Uz. On the other hand, the Babylonian occupation of Eastern Asia Minor has now been carried back long before the age of the third dynasty of Ur (2400 B.C.), the legendary account of the campaign of Sargon of Akkad, of which I gave a translation in the *Proceedings* of the Society of Biblical Archæology in 1915, having now been confirmed by a contemporaneous document found by Dr. Forrer among the Boghaz Keui tablets. At that early date Cappadocia was already in the enjoyment of Babylonian culture.

All this makes it necessary that the seal-impressions on the Kara Eyuk or Cappadocian tablets, some hundreds of which are now in the course of examination, should be carefully studied and compared. A large proportion of them are purely Babylonian, and reproduce the familiar scenes of the period of the third dynasty of Ur. But there are many others which are of Asianic origin. Among them are representations of chariots and carts drawn by horses, as well as of acrobatic performances in the bull-ring, closely resembling the scenes depicted by the Kretan artists. In view of Dr. Forrer's discovery that Sargon II, the High Priest of Assur in 2180 B.C., received tribute from the island of Kaptara or Krete, the fact opens up many possibilities. Indeed, one of the Assur

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tablets lately published (*Keilschrifttexte aus Assur*, 35, 1, No. 92, 41) informs us that Kaptara "beyond the Upper Sea" of the Mediterranean was the western boundary of the Empire of Sargon I of Akkad.

Mr. Hogarth divides his seals between four periods: (1) the Primitive before 1500 B.C., (2) the Cappadocian-Hittite or Hattic to 1200 B.C., (3) the Moschian-Hittite to 1000 B.C., and (4) the Moschian-Assyrian to 600 B.C. His evidence for this classification is largely derived from the excavations at Carchemish, and consequently will doubtless have to be modified when scientific excavation becomes possible in Asia Minor. But in the main I believe it will stand the test of future research. Instead of Moschian, however, the term Kaskian would be preferable, since I find that the earlier princes of Carchemish call their followers Kaskians, not Moschians, and trace their descent from the people of Melitene and the family of Mita or Midas at Tyana. It is true that they also claim rule over the Miskayi or Moschians, but the latter may have been a conquered nation. It is noteworthy that Tiglath-pileser I expressly states that the "soldiers" of Carchemish were Kaskians.

I believe also that Mr. Hogarth is right in tracing a certain class of seals to Cilicia. And it is possible that the semi-bullæ have the same origin. As a whole, however, what Mr. Hogarth calls "stamp-seals" originated in Asia Minor, where they developed out of the button-seal which spread through the Mediterranean into Egypt, and there, in the later days of the Old Empire, superseded the seal-cylinder of Babylonia. Mr. Hogarth's "hammer-seal" was at the outset a combination of the cylinder and the stamp-seal. The "bullæ" of which the famous "boss" of Tarkondemos is an example have been proved by a silver one in my possession to have been really seals, the flat side of which was used for stamping papyrus and the convex side for stamping clay. In the Hittite hieroglyphic script a picture of a bulla with its handle or string denotes the verb *ar*, "to write," just as the picture

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of the "hammer" seal denotes a seal in general (as in Nos. 194, 315).

Among the inscribed seals published by Mr. Hogarth, No. 191, discovered at Tamassos in Cyprus, contains the same name (Khulminius) as No. 330, discovered at Deve Huyuk, near Carchemish; a similar name (Khulminiân) is found on No. 326. According to a Boghaz Keui tablet, the two names are derived from that of a goddess who corresponded with the Babylonian Ilbaba. The Hittite characters on No. 181 read, "The life-stone (NA-ZI-QI in the Boghaz Keui texts) of Iskhuaris"; the inscription on No. 190 in the copy (p. 37) has been turned upside down. The inscription on the scaraboid No. 202 is an attempt to represent the Egyptian Si-Amon or Amensis, the heraldic lions on the back being copied from similar Egyptian pictures of the eighteenth and nineteenth dynasties. What Mr. Hogarth terms bulls' eyes circlets are found on scarabs of Thothmes III and other kings of the eighteenth dynasty, and were originally intended to denote the sun.

It only remains to add that the "get up" of the book is worthy of the traditions of the Clarendon Press, that the photographs are admirable, and that the foundations of a scientific knowledge of the seals of Western Asia have been laid in it once for all.

A. H. Sayce.

Extracts and Documents relating to Maratha History. Vol. I: Siva Chhatrapati. By Surendra Nath Sen, M.A. $9\frac{1}{2} \times 6$, 150 pp. Calcutta: 1920.

The Calcutta University and Mr. Sen deserve to be congratulated on the publication of this volume. It is a revised translation, with notes and appendices, of a famous *bakhar*, or chronicle, by Anant Sabhāsad, who was a servant of Sivaji's son Rajarām. Mr. Sen's translation reads well, and is, no

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doubt, correct. His notes, too, are good, though perhaps he is unnecessarily sarcastic about the works of Grant-Duff and Khāfī Khān. It is the fashion nowadays to disparage Khāfī Khān and to speak of him as a late and prejudiced writer. Yet he was a contemporary of Aurangzeb, and he has written generously of Sivaji's good conduct to female captives and his reverence for the Koran. His history was not published till fifty-two years after Sivaji's death, but Mr. Morley, Colonel Lees, and Professor Dowson are all agreed that it was written much earlier. The point is discussed by Lees in his *Materials for the History of India*, Hertford, 1868, and by Dowson in the seventh volume of Elliot's *History of India*. Whether the box, *ṣindūq*, that Khāfī K. speaks of was (as I am inclined to think) a cabinet, or only a metaphor for the author's memory, there can be no reasonable doubt that Khāfī Khān was in the habit of keeping diaries soon after he attained maturity. Many of his statements are supported by Sabhāsad, the only chronicler, as Mr. Sen calls him, whose work can claim to be contemporary. Sabhāsad was not an independent writer; he was the servant of Siv's son and wrote for his master, who, apparently, was very ignorant of his father's history. But Sabhāsad wrote before the full development of the Sivaji legend, and before native writers had the fear of Western sentiments about the baseness of assassinations before their eyes, and so he told no lies about the deaths of the two brothers Chandar Rāv and Suryaji Rāv. His withers were unwrung just as were those of the old Greeks who hymnized Harmodius and Aristogeiton (see Mr. Sen's note on p. 6 and the remarks of Professor Sarkar). Sivaji was a patriot, and had several heroic attributes, and we may say of him, as Johnson said of Cromwell, that he wanted nothing to raise him to heroic excellence but virtue. But it is as absurd to call him a saint as, to use Swinburne's phrase, it is to regard Mary Queen of Scots as a stingless creature. Sivaji's favourite goddess was Bhowānī, that is the goddess of the Thags, and he claimed that she appeared

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to him in a dream the night before the murder and promised to stand by him. "At your hands," she said, "I shall get Afzal killed. I grant you success."

The two startling events in Sivaji's career are his murder of Afzal and his son's escape from Agra in *bhanghies* of sweetmeats. I am sorry to find that the veteran historian Professor Jadu Nath Sarkar accepts the story that Afzal was the aggressor, and thinks that Sivaji acted in self-defence. There is no evidence for this, for no one was present except the two men, Afzal and Sivaji, and Sivaji destroyed the evidence against himself by stabbing Afzal, and, so far as I know, never published to Bijapur or the world any explanation of what had occurred. All the probabilities are against Afzal's being the assailant. He was an elderly man and so feeble that he had to move about in a litter. Moreover, he was only a servant, and his mission was to bring Sivaji to court. He had no authority to kill him and no motive for doing so. Simple-minded Sabhāsad admits this when he tells us at p. 9 that Sivaji was regarded at Bijapur as so formidable that no one would march against him till at last the Vizier said, "What is Sivaji? I will bring him alive, a prisoner, without even getting off my horse (? palanquin)." Jadu Nath Sarkar says (*History of Aurangzib*, IV, p. 38, note) that Khāfī K. says that both Afzal and Sivaji came to the interview unarmed, and he gives Khāfī K., II, 117, as the authority for this statement. But Khāfī K. in the place mentioned says exactly the opposite as regards Sivaji. He says, line 8, Sivaji had a dagger (*bichūā*) up his sleeve, and plunged it into Afzal's belly. Probably this *bichūā*, literally scorpion, was the *bāgnāq*, or tiger's claws, of which there is now a specimen in the Indian Section of the Victoria and Albert Museum, South Kensington.

Even if Khāfī K.'s authority were rejected on the ground of the lateness of his book, there is another Muhammadan historian who tells us of Afzal's assassination in a book composed several years before Sabhāsad's chronicle was written

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(see 'Ālamgīrnāma of Muh. Kāẓim, Bib. Ind. ed., p. 577). It is customary for Hindu writers to extol Sivaji's courage and to represent him as opposing the whole Moghul Empire. But the Pratapgarh incident occurred in the early days of Sivaji, and belongs to a petty war between Sivaji and the King of Bijapur. Aurangzeb had nothing to do with it, and there is no reason to suppose that Afzal was accompanied by a force of twelve thousand cavalry.

H. Beveridge.

Ibn Muyassar. Annales d'Égypte (Les Khalifes Fâṭimides). Texte Arabe, édité par M. Henri Massé. 15 × 11, 300 pp. Le Caire. 1919. [Publications de l'Institut Français d'Archéologie Orientale.]

This is a history of Egypt under Fāṭimid Caliphs, extending (with lacunæ comprising most of the reign of al-Ḥākim and the whole of that of al-Ẓāhir) from the year 362 (al-Mu'izz) to 553 (al-Fā'iz). According to the colophon of the unique manuscript in the Bibliothèque Nationale, it is an extract made by al-Maqrīzī (died 845) from the chronicle of Ibn Muyassar (died 677), which is said to have been a continuation of the history of al-Musabbiḥī (died 420). The problems arising from this ascription are discussed by M. Massé in his introduction.

The editor states that he was engaged on this work at the outbreak of the War, and that it was only after an interruption of four years that he was able to complete it. He admits "le caractère hâtif de l'établissement du texte", and asks the reader to regard the book as "le travail intermittent d'un soldat". If the text is not free from evidences of haste, the editor has made amends by providing his edition with a valuable series of accessories. In addition to a "Sommaire Chronologique" there are no less than five indexes, viz.: I, Index Historique (personal names, etc.); II, Index Géographique; III, Édifices, Monuments et Quartiers;

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IV, Index Administratif (official titles, etc.); V, Ouvrages Cités. The Index Historique is not in all respects satisfactory. When the text gives a personal name with the *kunyah* prefixed, it is the *kunyah* that M. Massé takes into account for purposes of indexing. Thus ابو الفتح يانس الرومى will be found among the names beginning with the letter ف, and there is not even a cross-reference under يانس, which is a much more important part of the name than the *kunyah*. The *kunyah*, in fact, is a part of the name that M. Massé might very well have disregarded. Under al-Ḥusain ibn Jauhar references are given to p. 55, l. 22, and p. 56, l. 4; later on under Abū 'Abdallāh al-Ḥusain ibn Jauhar the only reference is to p. 54, l. 3. Now those for whose benefit indexes are compiled have a right to expect that all such references to passages in which a single person is mentioned will be grouped in a single place, or, at least, that cross-references will be given to any other headings under which supplementary information will be found. Otherwise there is a danger that the primary object of an index may to some extent be defeated.

In establishing the text M. Massé has had to depend on a single manuscript, which, as we learn from the critical notes, is capable of giving readings like والنعمة (p. 55, l. 15) and واحذ (p. 18, l. 1). Naturally in such circumstances the reconstruction of the text presents difficulties, and the editor's emendations do not remove all the obscurities. The following remarks and suggestions will, it is hoped, be of use to readers of the book:—

Page 4, line 16: بين تولية. p. 6, l. 16: فى نسب. p. 6, l. 17: وعَزَوْا (and asserted their relationship to). p. 7, l 4: أنْ تَبرَ is correct. p. 8, l. 8: وانكفّ. p. 10, l. 16: مَلَكَ الامرَ مَعَدٌ (Ma'add has become master of the situation). p. 11, l. 9: وشُتِّتَ. p 12, l. 8: شَلّاء. p. 13, l. 6: بهيئة (with Maqrīzī). p. 14, l. 8: اسباب need not be altered. The expression اخذ فى اسباب كذا (to set about doing

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something) is very common in Ibn Iyās, cf. Būlāq ed. (1311), i, 44 ult., 67 ult., p. 124, l. 18, etc., etc. p. 15, l. 7: the MS. reading ثالث عشرى محرم need not be altered; ordinals of this type are common in late Arabic, cf. Ibn Iyās, i, 145, 4 a.f. فى ثالث عشرى شوال, iii, p. 77, l. 5: فى يوم السبت عشريه, etc., etc. p. 15, l. 14: عنهما جميعًا (so also p. 16, l. 2). p. 18, l. 8: خَرِبَ بسببها (was ruined in consequence of it). p. 21, l. 3: بقطعِه. p. 25, l. 7: عُرْبانها (its Bedouin). The فساد of the عربان was for centuries one of the plagues of Egypt. p. 30, l. 18, بالشآم (metre). p. 31, l. 7: حِدَةٍ. p. 32, l. 14: فدفعةً (once). p. 32, l. 15, ودفعةً (then a second time). p. 32, l. 16: ثالثةً (a third time). p. 33, l. 10: فزِيد. p. 33, l. 20: المستنصر. p. 34, l. 8: بالخفارة. p. 36, l. 1: رُثِىَ. p. 36, ll. 2-6: these verses are given in a more correct form in Abū'l-Maḥāsin (ed Popper), ii, 188. p. 36, 13: the emendation proposed is unmetrical. Read مُنِيتَ? p. 39, l. 4: وقتلوا [اهل] البلد (?). p. 39, l. 9: كثرةً. p. 47, l. 15: وٱشْدُدِ, cf. Qur'an, xx, 32. p. 48, l. 19: انصراف العساكر. p. 51, l. 2: تحرّك (with MS.). p. 51, l. 8: فى عَمّاريته. قدماه (his feet). p. 51, l. 10: غَسْلَ. p. 54, l. 4: وقِيد, cf. p. 44, l. 8 وقاد. p. 57, l. 21: اثخنته. p. 58, l. 19: ملؤ (i.e. مِلْؤٌ), the MS. reading, is correct. p. 59, l. 16: أَحْرَمَ بالصلاة, cf. Dozy. p. 59, l. 17: وأُرْتِجَ. p. 59, l. 19: فقرأ المأمون عنه بقية السورة (al-M. read the remainder of the verse for him). p. 62, l. 16: من التجار. p. 63, l. 3: Is الدوك a corruption of لرسل? p. 63 ult.: مُصافّ (pitched battle). p. 64, l. 14: وسَلِما. p. 65, l. 14: واحوالهم (?). p. 65, l. 17: إلّا ان. p. 67, l. 10: تشاجر. p. 68, l. 12: وقَدِمَ. p. 72, l. 16: وغيرها. p. 79, l. 2: يُصْغِ. p. 79, l. 17: وانقاذهم. p. 80, l. 5: بِأَجْمَعِهِمْ. p. 81, l. 14: سليمانُكم (your Solomon). p. 82, l. 5: جمعه. p. 82, l. 11: عَلَى مَنْ جاء يَطْلُبُ رِفْدَكم. p. 82, l. 12:

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وإذا تأخّر ما على (metre !). p. 83, l. 14 : شاغرًا, the MS. reading, (= "vacant") is correct, cf. Dozy. p. 85, l. 11 : مُثولهم. p. 85, l. 19 : ويُجيزهم. p. 94, l. 22 : والايالة. p. 95, l. 11 : حسن الترسّل. p. 97, l. 17 : فدَوَّخَتْ. p. 98, l. 2 : توسعةً.

C. A. STOREY.

MÉLANGES D'HISTOIRE ET DE GÉOGRAPHIE ORIENTALE. Tome 2. By HENRI CORDIER, Membre de l'Institut, Professeur à l'École des Langues Orientales. $9\frac{3}{4} \times 6\frac{1}{4}$, 322 pp. Paris: Maisonneuve & Fils. 1920.

This fine volume of 322 pages is a successor to a previous one published in 1914 from the pen of the same authoritative writer. The present collection comprises nineteen essays, in the main reviews and addresses, now brought together by M. Cordier from the various Journals and Comptes Rendues in which they first appeared, and bearing dates ranging from 1902 to 1919. The list of the titles of these articles will best indicate the wide range of these *Mélanges*. They are, in order: "Central and Eastern Asia and Chinese Studies," "The Chinese of Turgot," "Marco Polo's Itinerary in Persia," "The Situation in China" (written in 1912), "Delhi," "Islam in China," "the Quest of a N.W. and N.E. Passage to Asia" (an introduction of three pages to a lecture by M. Rabot), "Tibet, China, and England," "Excavations in Central Asia" (two papers, one of 1910 and a second of 1914), "The Imperial Chinese Maritime Customs" (also two papers, dated respectively 1906 and 1902—I have not read these), "Albuquerque," "Général de Beylié," "The Mongol Invasion of the Middle Ages," "Sculpture in Stone in China," "Baghdad," "Buddhist Art," and "Turks and Bulgars".

In all these essays we enjoy the ripe fruit of Professor Cordier's wide reading and exceptionally exact and

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well-digested scholarship. And the result is an ensemble of ordered knowledge and matured judgments on the often obscure and difficult topics examined, so that what the reader may have opened from curiosity or duty he is likely to close with the resolve that this volume shall, or the wish that it could (according as the income tax vampire and the rate-collecting horse-leech may have treated him), repose for frequent reference upon his bookshelves. And for that reason, and because the names and dates of little-known persons and unfamiliar places abound in it, it would have added to the value of this "medley" if it terminated with an index. And I may end these general remarks by expressing a sense of grateful appreciation of the very clear and, as it were, resonant presentation of historical events and processes which marks Professor Cordier's writing. It can hardly have been easy to attain this desirable clarity, one may suppose, with some of the subjects treated.

Take, for instance, the racial relations and ethnic movements—obscure and but partly ascertained or explained at best—that evolved their intricate and often sinister dramas in inner Asia from the third century B.C. to the fifteenth of our era. It is a kind of nightmare jazz-dance of Huns and Yueh-chih, Turks, Sakas, Ephthalites, Uigurs, and Mongols, conquering, expelling, massacring, mixing, vanishing, and now and again exploding in such human detonations as Attila, Tamerlane, and Genghis Khan. Nowhere, I believe, are these dim but portentous energies more clearly appreciated and outlined than in pages 8 to 11 of M. Cordier's introductory paper, an address delivered at the Sorbonne in 1908, and in that on the "Mongol Invasion of the Middle Ages".

So, too, with the paper contributed in 1910 to the *Revue Hebdomadaire* on "Tibet, China, and England". It opens with a geographical study of that forbidding, and long forbidden land, embodying also its administrative structure (with, of course, many of those repellent and monstrous

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Tibetan names, on which we might surmise Swift had based his Brobdingnag and Houyhnhnms). To this succeeds a most skilfully compressed narrative of the internal and external history of the vast realm, which develops at the end into an account of the diplomatic negotiations between China, Tibet, and Great Britain, and of the Younghusband expedition to Lhassa of 1904. M. Cordier is a friend of this country, but occasionally, as in this instance, a candid one. The more weighty, therefore, the concluding paragraph of this most valuable contribution. He thinks that the British expedition into Tibet will have had one result only—the consolidation of Chinese power in that country. The condition of India, he observes, does not permit us to-day to launch into risky adventures. The Japanese victories have had the most lively repercussion among the Hindus, "comme chez les autres peuples de l'Asie dont les jaunes désirent expulser leurs maîtres temporaires."

From these, and from all the essays in the *Mélanges*, the reader may rise with that comforting assurance that what Professor Cordier relates or describes as historical and geographical truth is indeed the net result of all research published up to the date when he summed it up, that it has been well scrutinized, long pondered, and judiciously expressed. If anyone regards that as a modest achievement, I venture the opinion that it demands a lifetime's labour to accomplish, and that M. Cordier has had to buy his success at that price.

Space remains only for a few observations on one further essay in the volume, that headed "L'Art Bouddhique", a review of Chavannes' *La Sculpture Bouddhique*, and Dr. and Mrs. Thomas' translation of Foucher's *The Beginnings of Buddhist Art.*

When in the second part of M. Cordier's careful paper he comes to consider with M. Foucher the very interesting subject of the origin of Buddhist art, he remarks that what characterizes the ancient sculptures is that they represent

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the life of Buddha *without* Buddha, and that this is due not to incapacity, but to tradition and custom. "What is the cause of this abstention?" he asks, and observes that the problem is delicate, but hardly seems resolvable. His subsequent reflections are valuable, but I may perhaps draw attention to the treatment of this point by an Italian authority, Alessandro della Seta, whose masterly volume has been rendered into admirable English by Miss Marion Harrison under the title of *Religion and Art*. For della Seta appears to me *rem acu tetigisse*, and to have found a sound and satisfying solution of the enigma. I venture to cite the pertinent passage as rendered in translation on pp. 305–6 of the English edition.

"Thus the date, forms, and character of Buddhist art," we read, "furnish proof of its Greek origin, which also accounts for certain of its distinctive features. There must have been a struggle with the tendency towards the symbolic representation of Buddha.

"Whilst in the art of the Gândhâra school the scenes concerning the incarnations of Buddha represent the reformer as a real figure, in the art of Middle India Buddha in these same scenes is represented by a symbol. A historical and narrative art which depicts nothing but the life of a single individual, and from those scenes banishes the individual to whom it owes its existence, an art which subjects itself to this ruthless self-mutilation exhibits remarkable inconsistency. But this inconsistency is explained by the natural aversion from figured forms underlying the spirit of the Buddhist doctrines. Contact with the civilization and art of Greece had led the Gândhâra Buddhists to conceal this aversion, for they saw in art a powerful means of propaganda and represented Buddha under his real aspect, which Asoka in his monuments had not yet dared to do. But to the Buddhists of Northern India, the cradle of the creed, such historical narrative representation must have appeared in the light of a crime against the purity of the

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doctrine; to assign a definite form to the figure of one who had denied the absolute value of all forms in the sphere of phenomena must have seemed the greatest insult to the spirit of his teaching. But the help offered by this art was too powerful to be despised, and the Buddhism of Middle India hoped to preserve its orthodoxy by permitting figured representation of the life of Buddha, but banishing the figure of the founder himself. For this reason the sculptured forms of Buddha-Gayâ, Barhut, and Sâñtshî appear headless. But Buddhists had hoped in vain thus to preserve the anti-image tendency; the thin end of the wedge had been inserted, and shortly afterwards they were forced to admit the figure of Buddha, and, moreover, under the classical aspect of the Gândhâra school. The sculpture of Amarâvatî illustrates the final stage of this last concession. The paintings of Ajantâ, executed a few centuries later, show how the tradition, by that time firmly established, had been maintained.

"This struggle would never have taken place if Buddhist art had been the spontaneous product of religious conception, for it would either have avoided dealing with the incarnations of Buddha or it would have permitted representations of his figure. The similar phenomenon presented by some specimens of Mohammedan art, which represents the deeds of sacred persons, but substitutes ciphers for the faces of these individuals, affords further proof of the difficulties with which only the religions which received their art from an alien civilization had to contend." L. C. HOPKINS.

Colloquial Arabic. SHUWA DIALECT OF BORNU, NIGERIA, AND OF THE REGION OF LAKE CHAD. Grammar and Vocabulary, with some proverbs and songs. By G. T. LETHEM, M.A., LL.B., Assistant District Officer, Political Department, Nigeria. 6 × 4, pp. viii, 487. Published for the Government of Nigeria by the Crown Agents for the Colonies. London: 1920.

Shuwa is the westernmost of the Arabic dialects of the Sudan. The Shuwa fall into principal groups of Arab tribes

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which have settled in Bornu within the last three hundred years. Their speech resembles that of their Arab neighbours to the east, of which a grammar was published in 1913 by Monsieur H. Carbou. Mr. Lethem's book is intended primarily for those who wish to speak Shuwa. It is arranged accordingly, and some exercises are provided for the beginner, who will probably not regret that, on the ground of expense, Latin type has been used almost throughout. At the same time, the book constitutes a full and careful study of the dialect, which does not appear to have been described in detail before, a study, moreover, by one who evidently has a competent knowledge of Arabic.

The English–Arabic vocabulary at the end of the book must contain several thousand native words and expressions. So large a collection is a notable achievement. The bulk of the words are Arabic. Those derived from Kanuri and Hausa are distinguished and the number is comparatively few. About as many, or perhaps more, are marked as being of unknown origin. Some of these look as if they had been drawn from African languages; but a fair proportion are Arabic, used in the original form and sense. Some of the Arabic words in the dialect have had their meanings extended. Permutations of radicals occur now and then.

The grammar is set out clearly and fully, though perhaps it would have been well to have given a little more prominence to the feminine *ta*, which seems only to be alluded to in a note in a place where it may easily escape attention, and to have given the full conjugation of all the weak verbs which are used as examples. Some of the grammatical features will be of interest to philologists. Such, for instance, are the transmutation of *j* into *d* and *d* into *j*, of which there are a few examples; and the feminine plural forms used for the pronouns and for verbs; the verbal forms of *alkattab*, *alkátab*, parallel with the ordinary V and VI forms, and *gamm* in the perfect running parallel with *gám* (rise).

There are many other peculiarities well worth a full

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examination; but on the whole the departure from standard in grammar as in vocabulary is remarkably small considering how long the Shuwa have been settled in the midst of a large alien population.

The proverbs and songs, besides being accompanied by translations, are explained in a way that makes them entertaining as well as instructive, though it must be confessed that certain obscurities remain. The allusion to Abu Zaid el Hilâlî has not been understood by the author.

These short pieces give an idea of the people, about whom also some information is contained in the introduction.

Mr. Lethem acknowledges indebtedness as regards the grammar to Mr. G. T. F. Tomlinson, who had partially completed a grammar and gave up all his material for incorporation. Thanks are due to Mr. Lethem for a valuable addition to our knowledge of Arabic dialects, a result of his personal observations, and one may hope for more.

A. R. G.

HISTORY OF THE ARMENIANS IN INDIA. By MESROVB J. SETH. $7\frac{1}{5} \times 4\frac{9}{10}$, pp. xxii and 190 + 8, cloth. Calcutta: published by the Author at 11 Wellesley Square, London. 1915.

Mr. Seth's book is a peculiarly interesting historical compilation, including the preface, extending over 212 closely printed small 8vo pages, useful both to the students of the general history of India and to those who are desirous to know who the Armenians are and what is their place in history. The author, who is well versed in classical Armenian, is an enthusiastic lover of the history of the ancient and worthy nation to whom he belongs, and has been indefatigable in tracing the records of the Armenian mercantile communities settled in the most important trading centres in India. The work was brought out at Calcutta towards the end of the year 1895, and either by modesty or some oversight, it is quite

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recently that its distinguished author has thought of presenting a copy to the library of the Royal Asiatic Society in London.

While the author was engaged upon putting his materials together (that is, about a year before its publication), Mr. W. E. Gladstone, whom he regarded as "Armenia's truest friend", had received an Anglo-Armenian deputation at Hawarden, his country home, on the anniversary of his eighty-fifth birthday, December 29, 1894, and in reply to their address made one of his most impressive, soul-stirring speeches in reprobation of the massacres perpetrated on the Armenians in the Sassun district—the ancient Taron. In a passage of this speech, which the author quotes in the preface of his work, Mr. Gladstone said that "the intelligence which had reached him tended strongly to a conclusion to the general effect that the outrages and scenes and abominations of 1876 in Bulgaria had been repeated in 1894 in Armenia, and after carefully considering the report it was time that one general shout of execration, not of men, but of deeds, one general shout of execration directed against deeds of wickedness, should rise from outraged humanity, and should force itself into the ears of the Sultan of Turkey and make him sensible, if anything could make him sensible, of the madness of such a course".

On reading these solemn and well-weighed words of the high-souled and venerable English statesman, who had always taken the forefront in the battle for liberty and justice, the young author decided to respectfully dedicate his work to him. In the meantime an inquiry into the massacres had been held at Mush, and the celebrated Memorandum of Reforms, dated May 11, 1895, had been agreed upon by the Great Powers, and handed in to the Sublime Porte; and yet, in spite of his "word of honour", given by the Sultan Abdul Hamid, that he would personally see the necessary reforms carried out in Armenia, the persecution, massacre, and spoliation of the Armenian nation had not ceased. So Mr. Gladstone, on reading the words of the dedication, in which he is described

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as "the veteran statesman whose strongly expressed sympathy for oppressed Armenians in Turkey has endeared him to every Armenian throughout the world", sent to the author, Mr. Mesrovb J. Seth, a letter of acknowledgment, in which the following emphatic words occur:—

"I continue to regard with acute pain and shame the triumph of wickedness in Turkey over a whole civilized and Christian world. I know of no similar disgrace upon record.

"The only and limited mitigation of their feelings is found in deep reverence for all those Armenians who have preferred their faith to their life."

If all British and foreign statesmen and legislatures had been inspired by these sentiments of one of Britain's greatest and noblest sons, had as freely given expression to their feelings and acted upon them, there is no doubt that the Armenian nation would, in the next twenty-five years, have been spared additional cruel losses and vicissitudes; and the Turks themselves would, each time they were left to their own devices, have been prevented from the ignominious and barbarous part they played as a government and as a quasi-theocratic community in which their ideals of supremacy made havoc of the moral and material interests of the most capable, energetic, enterprising, and pushing race in the Ottoman Empire.

The author describes the sources of the materials for his history, and how he was led to make researches by studying the inscriptions in classical Armenian tombstones in the national burying grounds of the community at Calcutta, Chinsurah, Agra, Gwalior, Surat, Bombay, Masulipatan, Madras, Deccah, Syedabad, Patna, and further on ten other centres of Armenian commerce. This formidable list of places shows how ubiquitous must the Armenian traders have been at one time in India, and how widespread were their mercantile operations.

He makes handsome acknowledgments for the help he received from Professor C. R. Wilson, M.A., Secretary of

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the Asiatic Society of Bengal, and mentions his indebtedness to the pages of William Bolt's *Considerations on Indian Affairs*, 1772, London.

He appropriately begins his history of the Armenians in India by giving a sketch of Armenian tradition as handed down from antiquity and continued to modern times. The erroneous idea disseminated by more than one modern English writer that the Armenians are a *religious* sect, or a merely commercial community, raises his indignation, as it has raised the ire of many of his compatriots, "on account of the cynicism lying underneath that idea." He is at pains to show what every reader of the Holy Bible ought to know, that the ancestral and primitive home of the Armenians is the land of Ararat, that descended from the Aryan stock their nation dates right back to the year 2111 B.C., when Haik, the son of Togormah, of the family of Japhet, killed in battle Belus of Assyria, and became the chief ancestor and founder of the Armenian nation, who to this day call themselves after his name and their country Haïasdan, i.e. the land of the Haik. The author shows by means of a genealogical table, based upon Genesis x, 2–3, and xi, 10–26, that Abraham came about three hundred years after Haik. Passing on, he mentions every passage in the Bible which has reference to Armenia.

Of Tigranes II, 93–39 B.C., of the dynasty of the Arsacidæ, who ruled in Armenia from 149 B.C. to A.D. 428, that is to say, for 577 years, the Roman general Sucullus wrote: "It is but a few days' journey from the country of Gabiri or Sebastia (the modern Sivas) into Armenia, where Tigranes, king of kings, is seated surrounded with that power which has wrested Asia from the Parthians, which carries Grecian colonies into Media, subdues Syria and Palestine."

Having quoted these words, the author could now add that the mandate for the Holy Land has been practically granted to Great Britain, and that for Syria Englishmen and Frenchmen might bear in mind that both these historic

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regions at one time formed part of the dominions of an Armenian Empire. He further quotes from Cicero, who, referring to Tigranes II, said that " he made the Republic of Rome tremble before the prowess of his arms ".

Then we have a brief summary of the history of Armenia from A.D. 428, and mention of the successful war waged against the Persian king of kings and his Zoroastrian chief priests for religious liberty and Christian independence, an event which the Armenians look upon as the religious and political rebirth of their nation just after they had made an alphabet for themselves and translated the Scriptures into the idiom of Ararat. After referring to the invasion of Armenia by the Saracens under Abdur-Rahman and the persecutions the Armenians endured at the hands of Arab Emirs or Governors, he describes the establishment of the Armenian kingdom in the year A.D. 859, under Prince Ashod of the Bagradite family, who made the city of Ani near Kars and whose dynasty ruled in Armenia Major upwards of two centuries, and under whom the Armenians enjoyed freedom and made very remarkable progress in the arts of civilization. He then describes how Ruben, a scion of the Bagradite dynasty, when the kingdom in Upper Armenia came to an end, founded the principality of Lesser Armenia and Cilicia, which eventually became a kingdom, and how this kingdom gave hospitality to the Crusaders on their way through Asia Minor for Palestine and entered into commercial relations with Venice and other European states.

Tracing the commercial relations of Armenia with India to a remote past, he says that, "From the days of Vasco de Gama, the Armenians carried on a prosperous trade with India by the land route via Persia." He dates the influx of the Armenians into India from the palmy days of the Mogul Empire, and narrates the circumstances in which Akbar the Great built a church for them for Christian worship at Agra, his capital, in the year 1562. It speaks well for their character that wherever the Armenian merchants settled

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in the principal commercial centres of India, they built themselves a church and provided it with a burial ground for their dead. Owing to this pious practice they both made provision for their religious needs and kept up their national tradition and identity in foreign lands. If as traders and merchants they did not leave a connected record of their history, they left many sepultural monuments by which their movements could be traced. And it was reserved to the zeal of Mr. Mesrovb J. Seth to utilize them for this history.

In his deliberate opinion the downfall of the Mogul Empire, followed by anarchy and troublous times, was the death-knell of the commercial pursuits of the Armenians. In Agra, Akbar's great capital, he found in the old cemetery of the Armenians nine tombstones bearing inscriptions in classical Armenian. The first of them reads as follows: "This is the tomb of Khoja (a Persian title of respect) Moorad, who departed to Christ in the year A.D. 1645." The author thinks that as the church was built here in 1562, many more deaths must have occurred up to 1701, the date of the last inscription.

Mr. Seth describes how for many years Armenia became the battle-field of the Persian and Turkish dominions respectively, representing the opposed Islamic sects of Shia'h and Sunni, and how both Persian and Turk devastated the country. This in order to prevent each other's power of recuperation. The Armenian inhabitants were the chief sufferers from the effects of their religious and political animosities, and there is an episode which, in consequence of its great hardships, the Armenians never forget.

This episode is described by the author as follows:—"In one of his many expeditions against Shah Abbas, the Great King of Persia, had occasion to visit the commercial city of Julfa on the banks of the Aras river, and a royal reception was accorded him by the opulent citizens. Their wealth dazzled the eyes of the avaricious and crafty monarch, and he resolved to make himself their master. He had long had the develop-

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ment of the trade of his country at heart, and as there was lack of commercial enterprise in his own subjects he determined to make the Armenians, who carried on an extensive trade with India, instrumental in improving the trade of his own with other countries, and particularly with India. He carried out his cherished project to the detriment of the Armenians, whose position as merchants at that period was rather enviable in the commercial world. He issued a mandate to his soldiers, to be carried out *within three days*, that they should raze the town level with the ground and force the inhabitants to leave their homes and migrate to Persia. The hapless Armenians, with tears and lamentations, were thus forced to abandon Julfa, and after encountering great hardship about twelve thousand families reached the city of Ispahan in A.D. 1605, where, however, every hospitality was accorded them by the great Shah Abbas. He evinced great interest in his *guests* (!), as he called them, and allowed them an extensive piece of ground in the suburbs of Zenderood. The Armenian colonists there built a city, which they styled New Julfa, in memory of the one abandoned."

He tells us that they prospered here, but a bad successor of Shah Abbas, wanting to appropriate their wealth, had recourse to the use of tortures, in consequence of which the well-to-do fled the country with their families and their wealth at the dead of night to avoid detection. From Ispahan they reached Basrah, and from thence sailed to India. The first port they reached was Surat. Here they formed a settlement and built two churches. He adds that Surat and its district was one of the parts of India, the earliest brought into close relations with European countries.

In his third chapter, the author gives an account of the settlement of the Armenians in Behar and Bengal, and shows how they formed a permanent settlement at Syedabad, the commercial suburb of Murshidabad, in virtue of a *firman* or decree issued in 1665 by Aurungzebe, the Mogul Emperor of Delhi. "At Syedabad," he says, "the Armenians

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rendered valuable services to the Honourable East India Company during the eventful year of 1756, when Holwell and his fellow-captives were taken to Murshidabad after the tragedy of the Black Hole of Calcutta." He informs us that the oldest Christian church in Bengal is the Roman Catholic Church at Bandel, built by the Portuguese in 1599, and the next the Armenian church at Chinsurah, erected by the Marcar family in 1695, and completed in 1697. It was dedicated to S. John the Baptist. When the donor of the church died in the same year a memorial inscription in Armenian verse was put over his tomb, of which Mr. Seth has given an excellent rendering. It deserves the special notice of those who take an interest in Christian monumental work.

In the course of his archæological work for the Bengal Government, Mr. Seth found in the Armenian churchyard of Calcutta a tomb bearing the date of July 11, 1630, "a much *older* Christian tomb," he states, "than that of Job Charnock in the churchyard of S. John's Church (the old cathedral), whose shrine, according to the popularly accepted tradition in connexion with the founding of Calcutta by him in 1690, was hitherto acknowledged as the oldest in Calcutta."

We then have the description of the most interesting episode of all to the students of the early history of Fort William and the English trade corporation there established. An eminent Armenian merchant named Khojah Israel Sarhad had ingratiated himself at the court of Azimush-Shan in 1687, and eventually became a favourite with his young son, Furrukh Siyar, then about fourteen years old. The friendship of the future emperor was won by presents of toys, at that time very acceptable, for which he expressed a great deal of satisfaction, often sending for Khojah Sarhad and making him sit by him many hours to show what uses they were for.[1]

[1] The result was that in July, 1698, for the sum of sixteen thousand rupees the English acquired letters-patent from the Prince allowing them to purchase from existing holders the right of renting the three villages of Calcutta, Sutanati, and Govindpur.

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In those days, as always, the Armenians, as fellow-traders, were rendering excellent service to the East India Company; and when, in 1715, they were under the necessity of sending a deputation to the Mogul Court at Delhi they secured the services of Khojah Israel Sarhad, who was known as an Armenian merchant of great eminence and vast influence. It appears that he had a thorough knowledge of English and Persian. Accordingly he was selected to accompany John Surman and Edward Stephenson, of the Company's service. Their object, we are told, was to solicit redress for past and security against future oppression, for an extension of their old and for many new privileges, and particularly for a small spot of ground to be allowed them wherever they settled a factory. The deputation reached Delhi on the 8th July, 1715. Khojah Sarhad, being on terms of intimacy with the Emperor Ferrukh Siyar, matters progressed speedily, and, on condition of paying ten thousand rupees per annum as a *peshcush* or acknowledgment, the Grand Firman or decree was issued on the 6th January, 1716–17. At p. 36, Mr. Seth gives a faithful translation of this state document, whose date is forty years before the battle of Plassey under Clive.

The good relations subsisting between the Armenians and the English ceased when the latter decided on becoming a territorial power. The cause was the salt monopoly, which in the hands of the Armenian operators and merchants was five times cheaper than after it was forcibly appropriated by Governor Harry Verelst and Francis Sykes, representing the council of the Company. This, we are told, caused the total ruin of many Armenian families.

The historian mentions with feelings of satisfaction and pride the charitable deeds performed by many of his Christian fellow-countrymen. He narrates that at the time of the tragedy of the Black Hole in 1756, when Drake, the Governor of Calcutta, with other English people took refuge in ships, dropped down with the tide, and anchored off Fulta, forty

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miles away from the city, it was Khojah Petrus Aratoon, an Armenian merchant of Calcutta, who secretly supplied them for some six months with boat-loads of provisions from Calcutta until the arrival of the "army of retribution" from Madras. He also mentions the patronage accorded to Greek merchants by Armenians, who represented the leading commercial element in the middle of the eighteenth century.

The author makes especial mention of Mesrovb David Thaliatin (1803–58) as his teacher at Calcutta, who, he says, gave a sound education in Armenian and English. What must be peculiarly interesting to many English readers is the circumstance that Thaliatin was admitted into Bishop's College at Calcutta as a foundationer in 1828 by the saintly Bishop Heber,[1] the well-known hymn-writer, who was at that time Bishop of Calcutta, and "whose memory", he informs us, "he (Thaliatin) reverenced throughout his life." Thus some of the spirit must have descended on him, and through him on the author himself. To show how well Thaliatin profited by his admission to Bishop's College, he says: "Here, after a course of five years, during which he studied English, Latin, Greek, and Persian, besides the fine arts, the Board of Education certified him as Master of Arts." He was born at Erivan and died at Shiras. A marble mural tablet erected in the Armenian church in that famous city describes him as "an erudite professor, a profound scholar, an eminent poet and historian".

The historian reserved his best encomiums for the Armenians of Southern India. "They settled permanently," he says, "at Madras in the year 1666. These opulent merchants were famous for their piety and true philanthropy, and for the great zeal they evinced in the advancement of Armenian classical literature in India. Their patriotism is perhaps unparalleled." The reader will find their names and the work they did in the pages of the history. I should have

[1] "From Greenland's icy mountains"; "Holy, holy, holy, Lord God Almighty" are two of the well-known eight hymns he wrote.

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liked to discuss the editorial article in the *Calcutta Statesman*, and Rev. Graham Sandberg's article in the *Calcutta Review* on Classical Armenian, and the treasures of classical Greek literature and early Christian literature found in an Armenian dress, but already I have far exceeded my space. Mr. Seth's work received highly appreciative notices in the Press of Calcutta and Bombay.

G. HAGOPIAN.

LINGUISTIC SURVEY OF INDIA: THE DARDIC OR PIŚĀCHĀ LANGUAGES. By Sir GEORGE GRIERSON, K.C.I.E., D.Litt., Ph.D. $14 \times 10\frac{1}{4}$, xi + 567 pp. Calcutta: Government Press, 1919.

The forefathers of the Indo-European race appear to have lived once in the Steppes of Russia. Some of them, the ancestors of the Aryans, went east and settled in Khiva, going on ultimately to Khokhand and Badakhshan. Their descendants now speak three branches of languages all dealt with in the Survey: (1) Indo-Aryan, comprising nearly twenty languages, including Pănjābī, Hĭndī, Gŭjrātī, Mărāṭhī, and Bengali, and in the north-west Sĭndhī and Laihndī; (2) Irano-Aryan, with eight modern Iranian languages, of which Persian and Pashto are the best known; (3) Píśāco-Aryan, or Dardo-Aryan, divided by Sir George Grierson into three groups, Kāfĭr, Khōwār, and Dărd. I retain "Aryan" in (2) and (3) to show the relationship. Sanskrit, great-uncle of all Indo-Aryan languages, is ancestor of none. To the Dardo-Aryan and Irano-Aryan languages it is first cousin, or first cousin once removed. Aryan languages number in all nearly forty, of which a third belong to the Dardo-Aryan branch, and are discussed in the volume before us. These and many other facts of fascinating interest may be discovered from the Linguistic Survey, the different parts of which have an appeal far transcending that of fiction.

The only one of the thirteen that has been studied with the

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help of competent native scholars is Kăśmīrī. I have often thought that Sir George Grierson has never done anything finer than his work on this language. Not only in these pages, but in his Kăśmīrī Manual, in the exhaustive articles contributed to the *Journal* of the Asiatic Society of Bengal, in *Lallā Vākyānī*, and in the Dictionary now passing through the press we have him at his best.

For the other languages there are no native scholars. Very few speakers are literate, and not one is well-educated. The resulting disadvantages will be easily realized. Except in the case of Kăśmīrī, the materials out of which the volume is built up are furnished by Europeans, travellers, or temporary residents, who for a short period made the country their home. One or two specimens were supplied by an Indian, but he was not a native. It follows that many points of grammar and pronunciation still require elucidation. Owing to the discrepancies in the material, Sir George hazards the not unnatural suggestions that in the Dard languages there are no real cerebrals, that there is much confusion in the use of cerebrals, and that in point of aspiration the languages differ largely from their Indian cousins.

With reference to Shina (Ṣiṇā) I am able to give a definite answer. I have studied it somewhat fully with native instructors in five dialects, those of Gĭlgĭt, Kohĭstān, Cĭlās, Gŭrēs, and Drās. All these dialects have eight cerebrals, Drāsī having nine, viz. *ṭ*, *ḍ*, *ṇ*, *ṛ*, *ç*, *ş*, *ẓ*, cerebral *j*, and in Drāsī *ḷ*. The letters *ṭ*, *ḍ*, *ṛ*, *ḷ*, are pronounced as in the Pănjāb, except that with a high front vowel *ṭ* and *ḍ* are slightly more advanced than with back or low-front vowels (a phenomenon observable also in Central Păhāṛī). Final *ṇ* is further forward than medial *ṇ*. The so-called palatal letters, *c*, *ś*, *j*, *zh*, have their cerebral counterparts, *ç*, *ş*, cerebral *j*, and *ẓ*. It is remarkable that a considerable majority of words containing *ṭ*, *ḍ*, *ṛ*, *ṇ* are non-Sanskritic, a fact which shows us that the letters belong to the original Aryan heritage of the race. Of the cerebral palatals a majority have Sanskritic

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equivalents. The forms *jr* and *tr* given in the specimens are mistakes for cerebral *j* and *ç*, the transcriber's ear having been conscious of some peculiarity, but not having understood it. The word *dhog*, about which a question is asked, should be *ḍok*.

The cerebral letters are used with extraordinary consistency, they are not confounded with non-cerebrals. This uniformity appears not only within the limits of one dialect, but over the whole area of the language. In the five dialects at which I have worked I have found the cerebrals the same everywhere (my notebooks were compiled in four different years independently of each other). A good illustration of consistency is the word *kon*, ear, which always has nom. sing. with alveolar *n*, but when a vowel follows, as in the nom. plur., every dialect changes it to a cerebral. This uniformity holds in the case of all cerebrals, and seems the more remarkable when we remember the very different state of affairs in Hindi and to some extent in Urdu and Panjabi.

The English sound of *th*, whether unvoiced as in "think", or voiced as in "then", does not occur in Ṣiṇā. Sonant letters are not aspirated except occasionally by accident. Surds are freely aspirated, but aspirated surds are kept distinct from unaspirated. In the case of words common to Ṣiṇā and Indo-Aryan languages Ṣiṇā in general has the same aspiration as India except for sonants. Thus the words for "eat" and "inquire" always contain *kh* as in India, *khōn*^{u}, *khojōn*^{u}, or *khoĭk*^{i}, *khojoĭk*^{i}; so, too, *thyōn*^{u}, *thoĭk*^{i}, to do, is always aspirated. The uniformity in cerebrals characterizes also aspiration. Final surds follow a separate rule. The existence of final unvoiced vowels and a tendency to partial devocalization of final sonants may mislead the unwary.

Two other matters of importance which do not appear from the specimens call for reference. One is the remarkable accentual system upon which nearly all the declension and conjugation depend; the other is the fact that Ṣiṇā contains tone words. Many words are pronounced with a low-rising

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tone similar to the low tone in Pănjābī and Laihndī. This tone is significant, as is seen from the following examples. † marks the tone :—

baṣ†, lung ; *baṣ*, language.
dār^{i}†, doors ; *dār*^{i}, boys.
lēl†, visible ; *lēl*, blood.
ḍak†, mouthful ; *ḍak*, post.
ṣĭdē†, having struck ; *ṣĭdĕ*, strike (imperat.).
thē†, having done ; *thĕ*, do (imperat.).

Six languages of the Kafir group receive 104 pages, Khowar gets 16, 84 are taken up with the discussion of Ṣiṇā, three dialects of Kohĭstānī get 44. The last 17 pages of the book are given to Burushaski ; the Mŭṇḍa problem is not gone into. Kăśmīrī, with its dialects, receives 274 pages, or nearly half the book. Everyone should study this section to see how a strangely complicated grammatical system may be simplified. A reader who begins Kăśmīrī with Sir George Grierson's help will not realize the magnitude of the task performed or the excellence of the performance. He will never understand that the well-trimmed garden, with its walks and beds and fountains was impenetrable jungle, dense undergrowth and clinging tendrils making passage well-nigh impossible. The garden has now been made and a linguistic pleasaunce open to all awaits its throng of visitors.

One request I have to make of the distinguished author before he publishes the Introductory volume of this series. It is this—that in dealing with Ṣiṇā, in which I take an affectionate interest, he will discontinue the use of the term "Brokpa" as the name of a dialect. Both from the map, where it includes the widely dissimilar dialects of Drās and Ḍāh Hănu, and from the text, where all other dialects of Ṣiṇā are called Shina, and these two alone called Brokpa, students will conclude that the two dialects called Brokpa are closely allied, but are separated by a considerable interval from those called Shina, whereas the truth is that the Drās

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dialect resembles Gŭrēsī as much as the English spoken in Edinburgh resembles that spoken in London, and is nearly allied to that spoken in Kohĭstān, but is unintelligible to the Ḍāh Hănu people.

The facts are, I believe, as follows: one of the numerous clans into which Ṣīṇs [1] are divided is called Brokpa. A few, very few, Brokpa families settled in Drās, a few miles away from Gŭrēs, and speak practically the same language as their fellow-Brokpas who remained behind, and as the other Ṣīṇ clans. A few more of the Brokpas have gone many marches further away, and are isolated in the villages of Ḍāh and Hănu, speaking a semi-Tibetan patois not understood by any other Ṣīṇs. I would suggest that the Drās dialect be called Ṣīṇā of Drās, or shortly Drāsī, and its distant relative in Tibetan overalls named simply Ḍāh Hănu. Should there be any reason for retaining the name Brokpa, let it be confined to the Ḍāh Hănu dialect.

If one were to review this volume according to its merits and interest, the review would become a pamphlet. But one must put a curb on one's inclinations. English scholarship need not fear comparison so long as it can produce books like the one before us or scholars like Sir George Grierson.

T. Grahame Bailey.

Linguistic Survey of India: Sindhi and Lahnda. By Sir George Grierson, K.C.I.E., D.Litt., Ph.D. $14 \times 10\frac{1}{4}$, viii + 584 pp. Calcutta: Government Press, 1919.

Sĭndhī and Lahnda or Laihndī [2] form the north-western group of the outer circle of Indo-Aryan languages. The romance of the inner and outer groups, as narrated by Sir George Grierson, is a story we never tire of; each time

[1] The word Ṣīṇ has cerebral ṣ, cerebral ṇ, and the low-rising tone.

[2] In the *Bulletin of the School of Oriental Studies*, vol. ii, part i, I have given my reasons for strongly preferring the feminine form *Laihndī*, which better accords with the North Indian mode of thought.

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we hear it we recall details inadequately appreciated before. These two languages belong to the great outer group, which includes Bengali and Assamese in the east and Mărāṭhī in the west, but the wedge driven into it has separated Sĭndhī and Laihndī from their brothers and quondam neighbours. The remarkable connexion with the Pĭśācā or Dardic languages of the north forms another chapter in their life-history, a chapter skilfully unfolded here. The Dards, we are told, sent their colonies down into India both east and west. At one time Dard languages were spoken over a larger part of northern India, and the result to-day is that a study of Eastern, Central, and Western Păhāṛī on the one hand, and of the two languages before us on the other, reveals unexpected borrowing from Dărdī in every case. In Sĭndhī the relationship is clear, owing to conditions which have prevented influences from other directions. The question of Laihndī is more complicated, but Sir George Grierson, who possesses Aladdin's lamp, illuminates the difficulties here, too, and shows the mutual encroachments of the old Dardic and Western Hindī languages, the former spreading to the east, and the latter to the west, so that now we have in the west Laihndī with Dardic influence strong and Hindī weak, and in the east Păñjābī, in which the opposite is the case, Hindī being much more powerful than Dărdī. Professor Sten Konow, as Sir George tells us, disagrees, and holds that the Pĭśācās came from Central India.

The volume deals with the speech of about ten million people on the western border of North India. Sĭndhī is spoken by three millions, including half a million who speak Kăcchī, and some thousands who speak minor dialects. Laihndī is spoken by seven million people, divided approximately as follows: Standard dialect four and a half millions (Standard proper one and a half millions, Mŭltānī over two millions, Thăḷī 750,000), North-West Laihndī one million, North-East Laihndī one and three-quarter millions.

Following on the introduction, over eighty pages are devoted to a lucid account of Sĭndhī grammar, after which come the

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specimens illustrating the grammar; a number are given in facsimile. The student's path is rendered easy by the principal features being pointed out. Dealing with Laihndī Sir George emphasises again the connexion with the Dardic languages. Laihndī is a tone language. In describing the tones Sir George quotes from an early work of mine, written when I was still feeling my way, and therefore not quite accurate. I gave the impression then that the deep or low-rising tone was heard only with sonant letters. The fact is that it may accompany any letter, sonant or surd. We hear it not only with *g*, *b*, *d*, etc., but also with *k*, *p*, *t*, and even with the aspirated forms, *kh*, *ph*, *th*. In this last case both the *k*, etc., and the aspiration are distinctly heard in addition to the deep tone. It is also found with *s*, *ś*, *c*, *ch*—in short, with any letter whatsoever. Strictly speaking it follows, not accompanies, a consonant with which it is connected. It accompanies, but may partially follow a vowel. The high-falling tone half precedes, half follows a consonant; it may do the same with a vowel, but it may be co-extensive with it. The two tones may be combined into a third tone. It is my experience that tones are heard more in northern Laihndī than in southern; e.g. in Kāgānī, on the extreme north they are strongly marked. This dialect is known locally as Hĭndkī, and so called in the Survey. The whole valley where it is spoken is named the Kāgān valley after the village of that name written Khagan on the maps and in the Survey. The area over which tones are found has not yet been ascertained.

On p. 264 attention is drawn to the presence of *kh* in a word of Indian origin. Both *kh* and *g* are, however, extremely common in Laihndī, becoming increasingly so as we go north. That this does not appear from the specimens is due to the fact that spelling is largely conventional, and a scribe, whether Indian or European, hardly realizes that to be accurate he should write *sikhdā*, learning; *vekhdā*, looking; *rakhdā*, placing; *tagṛā*, strong, and so with many other words.

The account of Laihndī grammar is a model of clearness.

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The six declensions are of great value in illustrating northern Panjābī. All but one of them (that with the internal vowel change) are found in Pănjābī. In this latter language the fem. plur. endings -*ẽ* and -*ã* are generally additional forms. It would be worth while finding out to what extent this is true of Laihndī.

On p. 253 *bhrā* is said to be irregular on the ground that its plural is *bhrā* instead of *bhrē*. I venture to suggest that the first declension should be said to consist of those masc. tadbhava nouns whose nom. sing. ends in *unaccented* -*ā*; *bhrā* or *bhirā* will then belong to the third declension and be regular, so far as the nom. plur. is concerned. Even the irregularity of obl. *bhrāū*, voc. *bhrāūā*, is open to question, for *bhrāū* is found in the nom. A similar doubt exists about the -*ŭ* inserted before the *s* of the future in verbs ending in a vowel. The infin. of the verb quoted is often āŭṇā, and one would *expect* the form *āŭsã*.

A point of some interest is suggested by causal verbs. On p. 268 we find "cause to be struck" or "sold", along with "cause to drink, seize, raise", etc. I think the following rule meets the case of causals: when the verb to be rendered causal is trans., the causal verb will always mean "cause to *be* drunk, seized, raised," etc.; but when the first verb is intrans., the causal will mean "cause to run, walk", etc. In the second class the object of a causal verb is the person or creature that walks or runs, in the first the object is not the person or creature that drinks, seizes, or raises, but the thing that is drunk, seized, or raised.

Another suggestion I make with the diffidence due from one reviewing the work of a master, viz. that the *s* in *jāteōs*, p. 271, is not the *s* of a nom. with an intrans. verb, but the *s* of the agent with a trans. verb. Two pages further on the same verb is given as trans., with which I agree.

One important peculiarity of the pres. part. in North-West Laihndī does not appear from the specimens. It can be well illustrated from the Hĭndkī or Kāgānī dialect. When the root

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of a verb ends in a surd letter, *-tā* is added for the pres. part., but when it ends in a sonant, the addition is *-dā*. Thus we get *dikhtā*, seeing; *haktā*, being able; but *jŭldā*, going; and *ḍōldā*, pouring. This rule, which is quite different from that prevailing in Ŭrdū, Hĭndī, Păn̆jābī, and even Southern Laihndī, has a bearing on the Romani question, which I have not seen mentioned elsewhere.

I have studied all Sir George Grierson's volumes in this series, and I never rise from the study of one of them without a feeling of astonishment at the mastery of detail, the power of extracting living facts out of a bewildering mass of often discordant minutiæ, the sureness of touch and quickness of vision. These qualities, granted to few in a generation, characterize the volume before us.

T. Grahame Bailey.

Catalogue of Coins in the Provincial Museum, Lucknow: Coins of the Mughal Emperors. By C. J. Brown. Vol. I, $10 \times 6\frac{1}{2}$, pp. 89, plates. 22. Vol. II, $10 \times 6\frac{1}{2}$, pp. 468. Oxford, 1920.

These two handsome volumes contain one of the largest collections of coins of the Moghul Emperors yet published, nearly 6,000 coins being described. Even allowing for the duplicates, the Lucknow series is much larger than that in the Panjab Museum or in the British Museum (now 600 gold, 3,000 silver, 800 copper) in point of numbers. In quality, however, it does not compare very favourably with either, in spite of an unrivalled series of silver coins of Akbar and Jahangir. The bulk of the coins came from treasure trove in the United Provinces with the addition of the Ellis Collection purchased in 1904. The Kashipur and Jhansi finds show what can be found in the United Provinces, and the Museum may look forward to a continual strengthening of its collection from the systematic work of the U.P. Coin Committee and the operations of the law of treasure trove.

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It is to be hoped that it may some day have a good find of gold coins, in which it is at present very weak.

Mr. Brown has followed the lines laid down by Mr. Nelson Wright in his *India Museum Catalogue* and Mr. Whitehead in his *Lahore Catalogue*. In the text of the Catalogue the coins are classified under metals and mints, which is now generally recognized as a great advance on the chronological arrangement of the *B.M. Catalogue*. The introductory volume I is a valuable contribution to the study of Moghul numismatics. The map of India illustrates our present knowledge of Moghul mints and reveals the great advance made since the *I.M. Catalogue* was published. An original and the most valuable feature of the work is the list of eighty different couplets found on Moghul coins, which shows the great number of new coins that have been found since the *B.M. Catalogue* appeared. Additions have no doubt still to be made to this list. A valuable glossary of words and phrases found on coins is followed by a list of denominations, etc. Mr. Brown in his mint list confines himself largely to coins in the Lucknow Collection, which does not add a great deal to Mr. Whitehead's comprehensive survey. The plates of ornaments found on coins represent a vast amount of work, which will be greatly appreciated by collectors and will enable them to identify many of their uncertain coins. Mr. Brown has performed his task most carefully and thoroughly, and the Clarendon Press has printed the volumes in admirable fashion.

We hope these volumes will soon be followed by others dealing with the coins of other dynasties in the Lucknow Museum. It ought to be strong in Hindu and Pathan coins, two series which have not had their share of attention in India. One can appreciate the fascination of Moghul coins for the collector, with their great variety of mints, denominations, and legends, but they are, after all, comparatively modern coins, covering a period for the history of which we have ample literary sources, and can never be of the same value to the historian as the numismatic records of earlier periods.

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We must not appear ungrateful to the Government of India for the attention it has given in recent years to the numismatist, who is no longer the *vox clamantis* he was in the day of Mr. Rodgers, but we hope the next Indian collection to be catalogued will not be a Moghul one.

J. ALLAN.

THE COPPER COINS OF INDIA. Part II: THE PANJAB AND CONTIGUOUS NATIVE STATES. By W. H. VALENTINE. $6\frac{1}{4} \times 9\frac{3}{4}$, pp. 78, 68 plates. London: Spink & Son, Limited. 1920.

Students of Oriental coins are familiar with Mr. Valentine's book on *Muhammadan Copper Coins* and with part I of the present work. Part II deals with the extensive coinages of North-Western India from about the eleventh century. In the case of the Sultans of Delhi the author includes many billon coins and has collected much information only attainable in scattered articles. Mr. Valentine has brought together a very fine series of copper coins of the Sikhs and Durranis. His drawings are beautifully done and very well reproduced. It is unfortunate that no uniformity is observed in the transliteration of the legends, which the beginner may find a little puzzling. The table of contractions should have been reproduced in this part also, as we presume the idea of the geographical arrangement is that it should appeal to collectors in the separate provinces. Coins No. 574*a*, *b*, *c* are surely South Indian and not of Delhi mint. The legends on the coins of Kaithal, etc., are those of Ahmad Shah Durrani, and not of the Moghul Ahmad. The coins of Nahan mint were published by Rodgers in the *JASB.*, 1897. Those who have found Mr. Valentine's part I useful will welcome this volume, which ought to be in every Indian library.

J. ALLAN.

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THE ATHARVAVEDIYA PANCHA-PATALIKA. Throwing light on the arrangement, division, and text of the Atharva Veda Samhita. With a [Hindi] translation and an index of the pratikas. Edited by BHAGWADDATTA, B.A. $7\frac{1}{2} + 5\frac{1}{4}$, pp. xiv, 40. 8vo. Lahore, 1920.

This ancient *anukramaṇī* of the Atharva-vēda, which is the third *lakṣaṇa-grantha* of the latter, has been known by name for some time to western students, and a considerable number of excerpts from it have been noticed in Śaṅkara Pāṇḍuraṅga Paṇḍit's Bombay edition of the AV., and in Whitney's translation (Harvard Oriental Series, vols. 7–8). Professor Bhagwaddatta now gives us the whole text of the tract, together with introduction, paraphrase, and notes in Hindi. Unfortunately his edition cannot be said to be a final one. Only two MSS. were used by him, and though he tells us that one of these is "very correctly written" (*bahut śuddh likhā huā hai*), the other is admittedly unsatisfactory, and both of them often agree in the same blunders, suggesting either that one is copied from the other or that both are derived from a common source. In some passages their corruptions seem to defy emendation. However, the editor has made the best of his rather inadequate materials, and his work enables us to estimate with tolerable completeness the value of the Pp. for the textual criticism of the AV.

As its name implies, the Pp. consists of five chapters. The first of these deals with the rules of *uktânukta*, i.e. abbreviation in copying the text of the AV. by the omission of phrases repeated from previous passages. The second enumerates the divisions of the text of the AV.,[1] while the third gives a list of the *avasānas* or stops in the

[1] Thus it states that in *kāṇḍas* I–IV all the *anuvākas*, with six exceptions, have five *sūktas* each; in V all have five *sūktas* each, with one exception (sc. iv); in VI all have ten *sūktas* apiece, with five exceptions; VII consists of hymns of one verse each; in VIII–XI each *anuvāka* contains two *sūktas*; in XII–XIV and XVII again each hymn consists only of one verse; and so forth.

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text (compare the introduction to Whitney's translation, p. cxxxii), the fourth the number of verses in the *anuvākas*, and the fifth the numbers of the stops in VIII–XVI. It may be noted that the Pp. knows only I–XVIII, and seems to make a division of the AV. into I–VII, VIII–XI, and XII–XVIII. In the main it may be said to confirm the current text of the Śaunakīya recension of the AV., though some details point to differences.

L. D. Barnett.

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ERRATA

In addition to the corrections by Mr. Krenkow (*JRAS.*, April, 1921, pp. 248–9), I offer here some more emendations to my paper on the library in possession of the shrine of Imam Riza at Meshed (*JRAS.*, 1920, pp. 535–63) :—

p. 538, second line from the bottom of the page. Instead of الاف الجنة read الاف التحية (a quite reasonable suggestion of an Indian Moulvie).

p. 545, No. 10, probably is the same as Nos. 9, 14, 15 (it was lithographed in Persia).

p. 546, Nos. 17 and 23 most probably are the manuscript copies of Tusi's List (edited by A. Sprenger, Calcutta, 1853–5). The Shi'a usually call this book رجال طوسی.

p. 551, No. 69. Most probably not *printed*, but *lithographed*. I know only two editions, both Indian lithography; one which appeared a long time ago, without date or place of publication, but judging from its appearance, published in Delhi. It is now very scarce. The other was lithographed at Bombay in 1318.

p. 555, No. 86. For المكمه read الحكمه. It is simply a misprint.

Ibid., No. 101. علويات is probably a mistake for معلقات.

p. 562, on the sixth line from the top. It is more probably the *third*, and not the second volume of the *Tajārib*. The publication alluded to in this passage is the Gibb Memorial Series, where a portion of this book appeared in facsimile.

W. Ivanow.

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NOTES OF THE QUARTER

(April–July, 1921)

ANNIVERSARY MEETING

The Anniversary Meeting was held on 10th May, Lord Reay, President, in the Chair. The Hon. Treasurer, Mr. Grant Brown, presented the balance-sheet for the past year, pointing out that the Society had temporarily borrowed £500 from the Oriental Translation Fund. Mr. Coldstream inquired whether the Society's assets covered its expenses, and the Hon. Treasurer explained that there was a small balance to its credit.

The Secretary's Report

Three Honorary Members have been elected during the past Session, namely, Professor Caland of Utrecht, Professor Clermont Ganneau, and Professor de la Vallée Poussin.

The Society has lost by death an Honorary Member, Professor Ernst Kuhn of Munich, an Honorary Vice-President in the person of Dr. Oliver Codrington, and three members of Council. These are Sir Charles Lyall (Vice-President), Mr. James Kennedy (Vice-President and late Hon. Treasurer), and Dr. Drummond Anderson.

During the year the following members of Council have been co-opted to fill the vacant seats: Sir Henry Howorth and Dr. M. Gaster as Vice-Presidents, and Mr. Otto Blagden, Professor A. A. Macdonell, and Mr. Perceval Yetts as ordinary members of Council, while Mr. Robert Mond has consented to be joint Honorary Treasurer. Under Rule 30 Mr. F. E. Pargiter retires from the post of Vice-President; under Rule 31 Dr. F. W. Thomas, Mr. Grant Brown, and Mr. A. G. Ellis retire respectively from the offices of Hon. Secretary, Hon. Treasurer, and Hon. Librarian. The Council recommend their re-election. Under Rule 32 Professor Barnett, Mr. L. C. Hopkins, and Col. Phillott resign their seats on the Council.

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ABSTRACT OF RECEIPTS AND

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RENTS RECEIVED		504 7 6
GRANT FROM INDIA OFFICE		210 0 0
GIFT FROM PRINCE VAJIRANANA		60 0 0
LOAN FROM SPECIAL FUNDS		500 0 0
JOURNAL ACCOUNT—		
Subscriptions	278 7 11	
Additional Copies sold	90 4 0	
S.B.A. Proceedings	29 9 3	
Sale of Index	1 4 6	
" " S.B.A.	4 11 6	
" Pamphlets	7 16 9	
		411 13 11
DIVIDENDS	57 5 9	
" PER POST OFFICE SAVINGS	19 17 8	
INCOME TAX RETURNED	22 8 9	
		99 12 2
SALE OF STOCK—		
£802 13*s.* 10*d.* New South Wales 4 per cent 1933	605 4 6	
£212 8*s.* Midland Railway Debentures 2½ per cent	88 13 8	
£888 16*s.* 9*d.* South Australian Government 3½ per cent, 1939.	586 10 7	
£300 Canada 3½ per cent, 1920–50	190 9 0	
£236 7*s.* 9*d.* 2½ per cent Consols	107 17 10	
£201 9*s.* 3*d.* New Zealand 4 per cent, 1943–63	137 15 2	
£297 7*s.* New Zealand 4 per cent, 1929	237 4 0	
		1,953 14 9
INTEREST ON DEPOSIT—		
Lloyds Bank	3 0 10	
Post Office Savings Bank	2 1 5	
		5 2 3
SUNDRY RECEIPTS—	8 18 11	
INCOME TAX SCHEDULE "A" paid in excess by Westminster Estate Office	11 5 0	
		20 3 11
BALANCE IN HAND JANUARY 1, 1920		859 6 9
		£5,755 14 8

FUNDS.

£454 16*s.* 9*d.* 3 per cent Local Loans Stock.
£350 5 per cent War Loan, 1929–47.
£125 National War Bonds (4th series), 1929.

Note.—There is a liability in respect of a loan from the Oriental Translation Fund of £500.

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PAYMENTS FOR THE YEAR 1920

PAYMENTS

	£	s.	d.	£	s.	d.
HOUSE ACCOUNT—						
Rent, Rates, Taxes, and Insurance	496	16	4½			
Gas and Electric Light	42	7	3			
Coals and Coke	41	19	4			
Telephone	8	0	6			
Stamping Agreements	2	7	0			
Window Cleaning	4	14	6			
Decorations and Repairs	7	0	4			
Other Expenditure	21	6	7			
				624	11	10½
EXPENSES ON ACCOUNT OF REMOVAL—						
Repairs and Decorations, etc.	2,125	16	10			
Electrical Fittings	241	4	8			
Heat Circular	251	13	0			
Removal Expenses	155	5	0			
Rent, December Quarter, 1920, 74 Grosvenor Street	125	0	0			
Furnishing	136	13	3			
Architect, employed by Society	157	16	8			
Agent ,, ,,	100	0	0			
Solicitor's Charges	82	18	6			
Miscellaneous	20	10	1			
				3,396	18	0
SALARIES AND WAGES				671	13	8
PRINTING AND STATIONERY				74	13	6
LIBRARY				24	18	6½
JOURNAL ACCOUNT—						
Printing	518	16	0			
Postage	40	19	0			
				559	15	0
AUDITOR'S FEE				5	5	0
BANK CHARGES				1	0	0
POSTAGE AND TELEGRAMS				49	10	0
INTEREST ON OVERDRAFT, LLOYDS	2	4	4			
,, SPECIAL FUNDS LOAN	7	10	0			
				9	14	4
SUNDRY PAYMENTS—						
Teas	20	16	11			
Lantern Operator	8	11	6			
Parcels and Fares	3	4	10			
Sundries	17	6	3			
				49	19	6
BALANCES IN HAND DECEMBER 31, 1920—						
Lloyds Bank, Current Account	191	13	1			
Post Office Savings Bank	94	1	7			
Petty Cash	2	0	7			
				287	15	3
				£5,755	14	8

We have examined the above Abstract of Receipts and Payments with the books and vouchers of the Society, and have verified the investments therein described, and we hereby certify the said abstract to be true and correct.

L. C. HOPKINS, for the Council.
C. FRAZER, for the Society.
N. E. WATERHOUSE, Professional Auditor.

R GRANT BROWN, *Hon. Treasurer.*

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SPECIAL FUNDS

Oriental Translation Fund

Receipts

1920.		£	s.	d.	£	s.	d.
Jan. 1.	Balance				690	11	4
	Sales	160	1	7			
	Interest on Loan	7	10	0			
	Interest on Deposit	8	0	1			
					175	11	8
					£866	3	0

Payments

		£	s.	d.	£	s.	d.
	Loan to General Fund	500	0	0			
	Storing of Quire Stock	1	4	2			
	Binding Vols. I–VI, X, and XIV	38	16	9			
	Bank Charges		5	0			
					540	5	11
1920. Dec. 31.	Balance Carried to Summary				325	17	1
					£866	3	0

Monograph Fund

Receipts

		£	s.	d.	£	s.	d.
Jan. 1.	Balance				206	10	6
	Sales	35	9	7			
	Interest	2	19	3			
					38	8	10
					£244	19	4

Payments

		£	s.	d.	£	s.	d.
	Printing Vol. XVII	186	13	6			
	Binding Do.	18	12	0			
					205	4	6
Dec. 31.	Balance Carried to Summary				39	13	10
					£244	19	4

TRUST FUNDS

Prize Publication Fund

Receipts

		£	s.	d.	£	s.	d.
Jan. 1.	Balance				252	13	1
	Sales	13	6	3			
	Dividends	18	0	0			
	Interest	5	6	9			
					36	13	0
					£289	6	1

Payments

		£	s.	d.	£	s.	d.
Dec. 31.	Balance Carried to Summary				289	6	1
					£289	6	1

Medal Fund

Receipts

		£	s.	d.	£	s.	d.
Jan. 1.	Balance				51	12	11
	Dividends	9	15	0			
	Interest		15	2			
					10	10	2

Payments

		£	s.	d.	£	s.	d.
Dec. 31.	Balance Carried to Summary				62	3	1

£62

Public Schools Gold Medal

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	Dividends			9	15	0			
	Interest				15	2			
							10	10	2
									£62

Public Schools Gold Medal

Jan. 1.	Balance						23	3	10
	Dividends			19	7	4			
	Interest				4	9			
							19	12	1
							£42	15	11

	Teas		2	8	6
	Book Prizes		5	5	0
	Cost of Medal		7	5	0
	Printing		1	5	0
				16	3	6
Dec. 31.	Balance Carried to Summary			26	12	5
			£42	15	11

Summary of Special Fund Balances

Oriental Translation Fund					325	17	1	
Monograph Fund					39	13	10	
					£365	10	11	
Cash at Bankers—On Current Account								365 10 11
								£365 10 11

Note.—There is a loan outstanding from the Oriental Translation Fund to the General Fund of £500.

Summary of Trust Funds

Prize Publication Fund					289	6	1	
Medal Fund					62	3	1	
Public Schools Gold Medal Fund					26	12	5	
					£378	1	7	
Cash at Bankers—On Current Account								378 1 7
								£378 1 7

Trust Funds

£600 Nottingham Corporation 3 per cent Irredeemable "B" Stock (Prize Publication Fund).

£325 Nottingham Corporation 3 per cent Irredeemable "A" Stock (Medal Fund).

£615 11*s.* 2*d.* Nottingham Corporation 3 per cent Irredeemable "B" Stock (Public Schools Medal Fund).

R. GRANT BROWN, *Hon. Treasurer.*

We have examined the above Statement with the books and vouchers, and hereby certify the same to be correct. We have also had produced to us certificates for Stock Investments and Bank Balances.

April 7, 1921.

L. C. HOPKINS, for the Council.
C. FRAZER, for the Society.
N. E. WATERHOUSE, Professional Auditor.

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FORLONG BEQUEST

ABSTRACT OF RECEIPTS AND PAYMENTS FOR THE YEAR 1920

RECEIPTS

1920.		£	s.	d.	£	s.	d.
Jan. 1.	BALANCE AT JANUARY 1, 1920—						
	Cash at Bank on Current Account . . .	191	15	10			
	Deposit Account . . .	252	17	0			
					444	12	10
	NEW SOUTH WALES 4 per cent	28	3	2			
	SOUTH AUSTRALIAN GOVERNMENT 4 per cent . .	28	8	10			
	BENGAL NAGPUR RAILWAY .	28	5	6			
	3½ per cent INDIA on £1,143 6*s.* 3*d.*	28	0	0			
	EAST INDIA RAILWAY CO. .	31	12	0			
	5 per cent WAR LOAN 1929–47 .	12	13	10			
					157	3	4
	INTEREST ON DEPOSIT ACCOUNT				12	15	1
	RETURN OF INCOME TAX .				58	14	5
					£673	5	8

PAYMENTS

		£	s.	d.
Jan. 31.	GRANT TO ORIENTAL SCHOOL FOR LECTURES	125	0	0
	CASH AT BANKERS DECEMBER 31, 1920—			
	On Current Account . . .	195	8	8
	On Deposit Account . . .	352	17	0
		£673	5	8

£1,010 Bengal Nagpur Railway 4 per cent Debenture Stock.
£1,015 16*s.* 3*d.* South Australian Government 4 per cent Inscribed Stock, 1940–60.
£45 East Indian Railway Company Annuity, Class "B".
£1,005 14*s.* 7*d.* New South Wales 4 per cent Stock, 1942–62.
£1,143 6*s.* 3*d.* India 3½ per cent Stock.
£253 18*s.* 4*d.* War Loan, 5 per cent, 1929–47.

We have examined the above Abstract of Receipts and Payments with the books and vouchers of the Society and have verified the Investments therein described, and we certify the said abstract to be true and correct.

L. C. HOPKINS, *for the Council.*
C. FRAZER, *for the Society.*
N. E. WATERHOUSE, *Professional Auditor.*

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The Council has nominated Professor A. A. Macdonell to be Vice-President, and Dr. Graham Bailey, Dr. Lionel Giles, Mr. F. E. Pargiter, and Sir Denison Ross to be ordinary members of Council.

The following 12 ordinary members have died during the past year :—

Mr. Ahmad M. Shaikh Ansari.
Mr. Wynne Baxter.
H.H. the Maharajah of Bobbili.
Mr. K. R. Cama.
Mrs. Philippa De Lisle.
Mrs. Finn.
Rev. C. W. Mitchell.
Mr. R. Prasada.
Effendi Faris Selim.
Rev. Anton Tien.
Dr. Satis Chandra, Vidyā-bhūsana.
Pandit R. Vaidya, Vidyaratna.

The following 18 members have resigned :—

Rev. F. M. Bussell.
Dr. Colin Campbell.
The Lord Chalmers.
Rev. Canon Cooke.
Mr. W. Craig.
Lady Davis.
Mr. Yuhanna Dawud.
Mr. Mohini Dhar.
Mr. Alfred Dobrée.
Miss Mary Foley.
Mr. S. Hillelson.
Mr. G. R. S. Mead.
Colonel W. J. Muir.
Babu P. Chandra, Protnatta Bisharad, Mukhopadhyaya.
Rev. F. C. Norton.
The Lord Sandhurst.
Dr. Otto Strauss.
Major A. C. Tancock.

The following 31 members have been removed owing to non-payment of their subscriptions :—

Mr. M. S. Makbul Ahmad.
Mr. S. Raza Ali.
Mr. S. Zahur Ali.
Professor S. V. Rangasamy Ayengar.
H.H. the Raja of Baliapattam.
Mr. Jyoti P. Banerjea.
Mr. A. R. Bountra.
Mr. J. Chatterjee, Vidyabinode.
Dr. W. Cohn.
Mr. L. A. Fanous.
Mr. J. E. Friend-Pereira.
Mr. Maung Gyi, B.A.
Dhawan L. T. Lal.
Mr. C. J. Marzetti.
Mr. B. V. Mehta.
Mr. M. G. Mehta.
Rai Sahib B. S. Misra.
Mr. N. G. Munro.
Dr. Johannes Nobel.
Count Leon Ostrorog.
Mr. Saya Tun Pé.

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Babu M. B. Rath.
Khan Mahomed Seljuqi.
Mr. G. Shankar.
Pandit Maya Shankar.
Mr. Hirnanda Shastri.
Professor D. R. Simon.
Babu A. P. Singh.
Mr. P. S. Subbarayen.
Mr. R. Tarini-Charan.
Professor Dr. Max Walleser.

During the past year 19 resident members have been elected, a record number for some years.

Mr. F. Anderson.
Mr. S. N. Buchia.
Lady Deane.
Mr. C. S. Elgood.
Mr. C. W. Gurner.
Mr. U. A. Hamid.
H. E. Baron Hayashi.
Mr. G. E. Hay.
Rev. G. S. Hitchcock.
Mr. R. L. Hobson.
Miss E. G. Kemp.
Mr. Paul King.
Mr. C. C. Polhill.
Mr. A. Sefi.
Sir Malcolm Seton.
Mr. A. Waley.
Mr. H. Weld-Blundell.
Mr. A. N. G. Whymant.
Mr. G. Willoughby-Meade.

The following 151 non-resident members have joined the Society :—

Mr. M. H. Abd-al-Razek.
Mr. Md. S. Ahmad.
Mr. W. F. Albright.
Maj. C. H. Armsbruster.
Mr. P. Bagchi.
Mr. C. A. Bamber.
Mr. S. K. Banerjee.
Mr. A. K. Banerji.
Mr. A. P. Banerji.
Mr. P. N. Banerji.
Mr. P. Basu.
Mr. S. T. Bhandare.
Mr. C. Bhandari.
Mr. D. K. Bhardraj.
Mr. B. Bhattacharya.
Mr. B. Bhushan.
Mr. H. G. S. Bivar.
Mr. J. Bowstead.
Mr. B. Bushan.
Mr. S. N. Bushia.
Mr. W. B. J. Carmichael.
Mr. H. C. Chakladar.
Mr. S. Charan.
Dr. J. Charpentier.
Mr. B. K. Chatterjea.
Mr. S. P. Chatterjee.
Mr. N. C. Chatterji.
Mr. P. N. Chowdhuri.
Mr. M. G. Coèdes.
Mr. S. A. Cook.
Mr. W. S. Cotterill.
Mr. M. B. L. Dar.
Mr. J. N. Das.
Dr. C. N. Davis.
Mr. R. Dayal.
Mr. L. N. Deb.

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Capt. R. C. Dent.
Mr. G. Dhar.
Mr. A. S. Doniach.
Mr. G. R. Driver.
Pandit K. N. Dube.
Mr. R. F. Eden.
Mrs. C. Edwards.
Mr. J. H. F. Evans.
Mr. H. Farmer.
Mr. H. J. Frampton.
Mr. J. S. Furnivall.
Mr. K. J. S. Gahlot.
Mr. K. Gangananda Sinha.
Mr. M. H. Ghorpaday.
Mr. S. C. Ghosh.
Mr. S. K. Ghosh.
Mr. P. Gopinath.
Mr. K. M. Gupta.
Mr. P. L. Gupta.
Mr. K. P. Guru.
Mr. R. M. Gwynn.
Mr. M. Habib.
Mr. M. A. K. Haidari.
Professor A. Haq.
Mr. K. K. Handiqui.
Mr. Md. G. Hassan.
Mr. G. E. Hay.
Mr. A. H. Hill.
Mr. M. Ishaque.
Mr. M. H. K. Iyengar.
Mr. H. E. Jagoe.
Deo of Jashpur.
Mr. M. S. W. Khan.
Pandit G. Krishna.
Mr. H. M. Lett.
Mr. R. Levy.
Mr. J. M. Maitra.
Mr. R. C. Maitra.
Mr. N. G. Majumdar.
Mr. J. Mann.
Mr. J. Martin.
Mr. L. N. Mathur.
Mr. O. B. Mathur.
Baron Gerard de Maydell.
Babu J. Mazumdar.
Mr. L. Misra.
Mr. D. B. R. Mudaliar.
Mr. H. N. Mukerjea.
Mr. B. L. Mukerjee.
Mr. A. P. Mullick.
Mr. A. C. Nag.
Mr. N. C. Nandi.
Mr. S. Narain.
Mr. B. Narayan.
Mr. K. G. Natesa.
Mr. B. N. Navagire.
Mr. Narpal Singh.
Mr. V. M. Nowle.
Pandit R. Ojha.
Mr. H. J. Oulsnam.
Mr. F. Pal.
Mr. H. M. Paterson.
Mr. M. B. Pithawalla.
Mr. C. A. Pittar.
Mr. B. G. Poror, Zemindar.
Mr. D. Porter.
Mr. C. Proctor.
Mr. Qureshi.
Mr. S. S. Raghavan.
Mr. C. K. Raja.
Mr. K. R. Ramabhadran.
Mr. R. K. Rao.
Mr. T. R. G. Rao.
Mr. Md. A. Rashid.
Mr. S. C. Ray.
Mr. W. H. Rees.
Mr. D. Rege.
Mr. B. Reu.

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Mr. G. N. Roerich.
Mr. R. Saksena.
Professor S. C. Sarkar.
Mr. P. Sarkar.
Mr. V. L. Sastri.
Col. R. C. F. Schomberg.
Mr. J. Scotland.
Mr. M. J. Seth.
Mr. A. S. Sewell.
Mr. A. K. Sharma.
Mr. A. Siddiqi.
Mr. A. R. Siddiqi.
Mr. M. S. Sidersky.
Sahib Bahadur R. Hardeo Singh.
Professor M. Sinha.
Babu M. Sinha.
Mr. W. Sinha.
Professor G. Sircar.
Mr. K. N. Sitaram.
Mr. W. E. Soothill.
Mr. W. B. Stevenson.
Mr. W. Q. Taggart.
Mr. G. C. Tambe.
Mr. M. K. Thin.
Rev. D. G. Thirtle.
Mr. H. M. Tin.
Mr. C. G. C. Trench.
Right Rev. A. Trollope Bishop (in Corea).
Mr. W. G. Urdhwareshe.
Mr. G. N. S. Varma.
Mr. S. Varma.
Mr. A. R. C. Westlake.
Mr. L. M. Wynch.
Mr. D. Yellin.
Major L. M. Yetts.
Mr. Md. Yusuf.
Mr. Md. Yusuff.

The total number of new members now stands at 170. When the 62 lost to the Society by death, resignation, or removal have been deducted there remain a total of 108 new resident and non-resident members. Part of this satisfactory state of affairs must be ascribed to the success of the appeals signed by the President that were sent to all members asking them to enlist new members. It is to be hoped that the further appeals that have been issued to the ruling Princes of India, to Church Dignitaries, to Heads of Universities and Public Schools, and to Coaches for the Indian Civil Service may also bear fruit.

Lectures

The following lectures were delivered during the Session, most of them illustrated by excellent slides :—

October 12, 1920. "The Marsh Arabs of Mesopotamia," by Dr. Patrick Buxton.

November 9, 1920. "Aurungzab Vindicated," by Sirdar Ikbal Ali Shah.

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December 14, 1920. "Some Arabic Poets of the Abbasid Period," by Dr. R. Nicholson.

January 18, 1921. "The Buddhist Temples of the Diamond Mountain of Korea," by Miss H. C. Bowser.

February 8, 1921. "Under Bolshevik Rule in Russian Turkestan," by Miss R. Houston.

March 8, 1921. "Nomad Tribes of South-West Persia," by Mr. D. A. Lane (late of South Persia Rifles).

April 12, 1921. "Baghdad to Teheran: a new variation of an old theme," by Mr. R. Levy.

Dr. R. Blake, of Harvard University, will read a paper on June 14th entitled "The Sources for the History of Georgian Ecclesiastical Literature".

Forlong Bequest

The Council approved that Dr. McGovern should deliver a course of lectures on Buddhism in accordance with this bequest.

Books Published by the Society

Lalla-Vakyani. By Sir G. Grierson and Dr. Barnett (Monograph Fund.)

Linguistic Studies of the Himalayas. By Dr. Grahame Bailey. (Monograph Fund.)

Ishkashmi, Zebaki, and Yazghulami. By Sir G. Grierson. (Prize Publications Fund.)

The Ottoman Conquest of Egypt from the Arabic Chronicle of Ibn Iyas. By Colonel Salmon. (Oriental Translation Fund.)

The following Books are in the Press

El-Asatir. By Dr. M. Gaster. (Oriental Translation Fund.)

Bakhtiari Phonology. By Major Lorimer. (Monograph Fund.)

Letting of Rooms.

The Society has now let all its vacant rooms as offices to the following Societies:—

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The Anthroposophical Society.
The Anglo-Italian Society.
The British Italian League.
The Central Asian Society.
The Italian Red Cross Society.
The Persia Society.
The Society of Women Musicians.

Invitations to the Society

An invitation was sent to the Society from the American Oriental Society inviting it to send delegates to the Meeting at Baltimore, 29th–31st March. This the Council was obliged to decline, being unable to find members who could undertake the journey.

Lord and Lady Pentland invited the Council and members of the Society to a Reception on 24th February to meet Lord Reading before his departure for India.

Centenary

The year 1923 will be the Centenary of the Royal Asiatic Society, and a Committee has been formed to celebrate the event and to publish a Centenary Volume. The names of the Committee are as follows :—

Professor Margoliouth (Chairman).
Mr. F. E. Pargiter (General Editor).
Mr. C. Otto Blagden.
Dr. B. Gray.
Mr. Griffith.
Mr. L. C. Hopkins.
Sir H. Howorth.
Professor Langdon.
Professor Macdonell.
Dr. R. Nicholson.
Professor Sayce.

and the Honorary Officers of the Society.

The thanks of the Society is due to the Honorary Solicitor, Mr. Alexander Wilson; the Honorary Auditors, Mrs. Frazer and Mr. L. C. Hopkins; and the Official Auditors, Messrs. Price, Waterhouse & Co., for their kind services.

The President inquired whether any member would wish to comment on the report, and Sir Denison Ross spoke in warm terms of the services rendered to the Library of the Society by Mr. Ellis, the Hon. Librarian.

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Mr. F. E. PARGITER, proposing the adoption of the Report, said that the characteristic feature of the year had been that of readjustment. It began with their removal to Grosvenor Street. They had had to adapt themselves to the change, and there had been great labour in getting their library put into a workable condition. He was glad to say that owing to the ready co-operation of their officers the work was very nearly completed. Another point of readjustment was the amalgamation with this Society of the Society of Biblical Archæology, which came into active force during the past year. The *Journal* now contained many more articles than formerly on subjects of interest to that Society. The range of their subjects had thus been increased, but the rise in cost of printing had seriously handicapped them in publishing the *Journal*, so that while they had a larger range of subjects they had a smaller compass to publish papers on them. This was a very great misfortune in respect to the standing of their Society throughout the whole world. They hoped that things might improve, and they had to bear in mind that during the year they had borne very heavy non-recurring expenditure for the removal. They might now expect not only to pay their way without difficulty, but also do something in building up reserves to recoup themselves for the money they had laid out. Readjustment was going on not only in their domestic affairs but also in the countries to which they devoted their studies, and he might be permitted to say in regard to India, the country with which they were most closely connected, that they hoped that the new system of Government, unparalleled in the whole of Asia, would prove a complete success.

Lord MESTON, in seconding the Report, said that the past year seemed to have been a fitting successor to those sad, anxious years of war during which the Society kept the torch of Asiatic scholarship alight, and when there seemed to be in the world very little light indeed except flames from the Nether Regions. He took that opportunity on behalf of the

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European residents in India, and more particularly the members of the Public Services there to thank the Society for the ideals it had maintained, the wide range of cultured interests it had served, and for the link that it provided for fellowship between Europeans and their Indian fellow subjects. The link was between East and West. It was unfortunately true that the traditions of scholarship which used to attach to the Public Services in India had in recent years become a little thin. When he first went to the United Provinces there were actually serving there Vincent Smith, F. S. Growse, William Irvine, Dr. Hoey, William Crook, James Kennedy, and Howell, the Arabic scholar. That was a group of men belonging to the I.C.S. in one province, and apart from them there were distinguished names in the educational and other services, men like Griffiths and Venis. For a group of scholars of similar character they would look in vain to-day in any province of India, and probably in the whole of India. It was not, he thought, that the spirit had gone ; it was not that the present day civilians took their mental recreations in less reputable fields, or devoted themselves to more transitory things. It was due to the pressure of life, the absorbing claims of absolute duty, the anxiety as to ways and means. The opportunities for leisure were scanty, and he was afraid that the pleasant communion with the older school of cultured Indians was largely a thing of the past. It had been replaced to some extent by association with Indians who thought a good deal more of the future than of the past. So long as controversy raged to the extent to which it had raged in India in the last few years, and so long as political power was engaged in shifting its balance, it could hardly be expected that the Indian Services would add in the same degree as they used to the material of scholarship which the Society collected. It was indeed a matter to be profoundly grateful for that the work during this transitional period was being carried on by older men who had retired from active work in India, who had according to Hindu ideas reached the stage

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of Sunyasi, and who were giving the Society the benefit of their wisdom. He believed that things would settle down, and that when the Services settled down there would be a revival of learning and its members would turn again to those regions of ancient race and tradition which had such a mysterious fascination for the human mind, and which opened up, especially in India, such avenues of fresh investigation. Meanwhile there was something of a new force in a group of young Indians, many of them under the banner of that Society, acquainted with the methods of modern criticism, exploring fields with honesty and sincerity, and acquiring an enthusiasm for research. Their number was not large but it would grow, and he regarded the uprising of this school as one of the best fruits of the new Nationalist movement. It was just here that the Society could enhance its value by maintaining the bond of culture between Englishmen and the new Indian critical school of culture. It was by this road that the Society could do so much to bring the East and West together, and to diminish the wholly fictitious importance of racial differences. The Society had earned the sincere gratitude of all who wished to bring about a better understanding between East and West. Long might it continue to flourish.

The PRESIDENT then delivered the following speech :—

I propose that His Royal Highness the Prince of Wales be invited to become a Vice-Patron of this Society.

I also propose that Lord Reading be invited to hold the same post during his tenure of office as Viceroy, with the hope that all succeeding Viceroys may follow his example. I propose Lord Chelmsford as Resident Member.

During the past year the Society has had to mourn the loss of several of its members whose efforts had done much to raise the Society to the high position that it holds in the world of learning. I will mention first Dr. Oliver Codrington, one of our Honorary Vice-Presidents, the distinguished Numismatist, whose work for the Library will always be held

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in gratitude. Last June our late Hon. Treasurer, Mr. James Kennedy, passed away, but his devotion to the interests of the Society and his skilful management of its finances will not be forgotten. Sir Charles Lyall, the brilliant Arabic scholar, and Dr. Drummond Anderson, a great authority in Indian languages, leave our Council the poorer for their expert advice.

It is with great regret that I have to record the illness of our Director, Sir Richard Temple, whose strenuous activities during the war led to a breakdown last December. We have, I am glad to say, encouraging reports from Switzerland as to his progress, and trust that before long the Society may have the benefit of his presence again.

Our Honorary Secretary, Dr. F. W. Thomas, has been spending six months in India, where he has borne the interests of the Society in mind and has been made an Honorary Member of the Bombay Branch of the R.A.S. I am able to read to you his last interesting letter. During his absence Mr. Longworth Dames filled his place until compelled to give up his duties through illness. Our best thanks are due to Mr. Grant Brown for the time and care he has given to our finances and the means to improve them; also to Mr. Ellis, who has re-arranged the whole Library on the change of premises. He worked here during both summer and Easter holidays.

Mr. Robert Mond has kindly consented to become our Joint Hon. Treasurer, and the Society hopes to draw benefit from his financial experience. Ill-health detains him in the South of France.

At the end of last June, to our regret, Miss Hull resigned her post as Secretary, but we were fortunate in securing Miss Ella Sykes as her successor, and I wish to commend the work of the staff during the past year.

During this period the *Journal* has maintained its high reputation, and has been enriched by articles from the pens of Sir George Grierson, Mr. Longworth Dames, Professor

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Langdon, Professor Sayce, and Mr. L. C. Hopkins, to name only a few of our distinguished contributors. One of the features of the *Journal* has been its reviews of Oriental literature, and here I must thank the many gentlemen who so generously give their time to this work. The Council thoroughly realize their responsibility with regard to the contents of the *Journal*.

Several valuable lectures on Oriental subjects have been delivered during the Session, Dr. R. Nicholson's paper on "Some Arabic Poets of the Abbasid Period" attracting considerable attention.

I have now the pleasant duty of thanking the various friends who have presented gifts to the Society. An anonymous donor sent £100 to increase the salary of the Secretary, Prince Vajiranana of Siam gave £60 in celebration of his sixtieth birthday, and Sir R. Temple and Mr. H. Beveridge sent sums of £10 each, as they were unable to respond to the appeal to enlist new members, and other donations have been received. Colonel Knox-Niven has presented an interesting coat of Oriental chain armour which was dug up near the reputed site of the grave of Bucephalus in the Panjab, and which can be seen in the Council Room. From the Dutch Government we have received a most interesting volume on the Temple of Barabudur.

The mention of these gifts leads me to the subject of the finances of the Society. Our securities have been almost entirely expended on the costly move from Albemarle Street to these premises, and though the India Office has just increased its annual grant by a most welcome addition of a hundred guineas, yet, owing to the greatly enhanced cost of printing, that sum does not nearly cover the outgoings of the Society, although strict economy is practised.

Owing to this fact the Council, after much deliberation, are recommending that the non-resident members' subscriptions be raised from 30s. to 2 guineas, and that there should be a lower compounding fee with a sliding scale according

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to age, hoping thereby to attract members to compound. A leaflet, explaining the reasons for the contemplated change in the non-resident members' subscription, has been sent to every member, and the question will be finally settled at an Extraordinary General Meeting on the 5th July.

You have listened to the list of books published by the Society during the past year, but these have so depleted the various funds at its disposal, the Oriental Translations, the Monograph, and the Prize Publication Funds, that at present the Society is quite unable to undertake the publication of any new works. This is most unfortunate, because, though the high prestige of the Society is maintained by means of our great *Journal* known throughout the learned world, yet much of it rests upon the books we publish. Mr. Arbuthnot, by leaving a generous bequest to found the Oriental Translations Fund, has enabled the Society to bring out many works which no ordinary publisher would take, fearing that such a venture would land him in loss. These facts embolden me to appeal to our members to subscribe to these funds. Learned men are, as a rule, poor, so it rests with others who being unable to devote themselves to such studies, yet realize their importance to the world and can materially assist. In the early days of our Society men of rank and position were ready to act the part of Macaenas to those who were dowered with more brains than cash. May I venture to hope that there are still some among us who rank things spiritual higher than things material? It would be a fitting way to celebrate our Centenary in 1923 by bringing out some learned works that otherwise might never be given to the world.

I wish to give our best thanks to those who have been so successful in recruiting new members. To-day we have elected 30 non-resident members presented by one member.

The relations between East and West are changing. This change should heighten the interest taken in those Oriental studies of which this Society seeks to be the interpreter. More and more the East reveals its secrets to us. Whilst

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I am addressing you the Imperial Crown Prince of Japan is being received by their Majesties the King and Queen. The nation welcomes H.R.H. as representing our ally during the late war. No one at the time of the Treaty of Vienna could have foreseen that in the struggle for sanctity of treaties an Eastern Power would have played a prominent part. We cannot show our appreciation in a better way than by studying the history in its widest aspect of those Oriental nations with whom our relations will always, I trust, become ever more friendly.

Field-Marshal His Royal Highness the Duke of Connaught has graciously consented to become a Vice-patron.

The American Academy of Arts and Sciences has invited the Society to send delegates to its meeting at Boston on 5th October. Dr. Cowley, Professor Langdon, Mr. Shuttleworth, and Mr. Weld-Blundell have accepted the invitation.

A notice was sent to all members calling a Special General Meeting on 5th July to settle the question of raising the non-resident subscription. It was however decided to postpone the matter owing to the hardship involved to Indian members by the exchange.

Lady Lyall has presented the *Journals of the Society of Biblical Archæology* belonging to the late Sir Charles Lyall, and Mrs. Waite has given some Journals.

The Executors of the late Dr. Codrington have assigned to the Society the copyright of his *Manual of Musulman Numismatics*.

Miss Manning has offered a framed photograph of the bust of Mr. Thomas Manning, the friend of Charles Lamb and the first Englishman to visit Lhasa, and Mr. George Tate has forwarded a map of the traditional site of Alexander's Victory over Porus.

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ADDITIONS TO THE LIBRARY

Books

Archæological Department, Mysore. Annual Report, 1920. Bangalore, 1921. *From the Secretary of State.*

Archæological Survey of India. Central Circle. Annual Report, 1919–20. Supplement, Illustrations, 1918–19. Patna, 1920. *From the Government of India.*

—— Vol. xxix. South Indian Inscriptions. Edited and translated by Rao Sahib H. Krishna Sastri. Madras, 1920. *From the Secretary of State.*

—— Memoirs, No. 8. Six Sculptures from Mahoba, by K. N. Dikshit. Calcutta, 1921. *From the Government of India.*

Ars Asiatica, publié sous la direction de Victor Goloubew. Vol. ii. Six Monuments de la Sculpture Chinoise, par E. Chavannes. Bruxelles, 1914.

—— Vol. iii. Sculptures Çivaïtes, par A. Rodin, A. Coomaraswamy, E. B. Havell, et V. Goloubew. Bruxelles, 1921. *From Messrs. E. Van Oest & Cie.*

Baillet, J., Inscriptions Grecques et Latines des Tombeaux des Rois ou Syringes à Thèbes. Fasc. i. Mémoires de l'Institut Français d'Archéologie Orientale du Caire. T. xlii. Le Caire, 1920. *From the Publishers.*

Ball, U. N., Ancient India. Calcutta, 1921. *From the Author.*

Bengal Government Records. Proceedings, Council of Revenue, Murshidabad, January to February, 1771. Vol. iii. Calcutta, 1920. *From the Secretary of State.*

Binyon, L., and Arnold, T. W., The Court Painters of the Grand Moguls. London, 1921. *From the Publishers.*

Bloomfield, Maurice, Studies in Honour of. By a group of his Pupils. New Haven and London, 1920. *From the Publishers.*

Bombay Government Records. Selections No. DLXVIII, Revision Settlement of the Shirpur Taluka, W. Khandesh. No. DLXXX, Khanapur Taluka, Belgaum District. No. DLXXXI, Revision Settlement of the Purandhar Taluka. No. DLXXXII, Revision Settlement of the Taloda Taluka, W. Khandesh. No. DLXXXIII, Revision Settlement of the Dhulia Taluka, W. Khandesh. Bombay, 1920–1. *From the Secretary of State.*

Borel, H., Rhythm of Life, based on the Philosophy of Lao-Tse. Translated by M. E. Reynolds from the Dutch. London, 1921. *From the Publishers.*

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Brandes, J. L. A., Pararaton (Ken Arok) of het Boek der Koningen van Tumapĕl en van Majapahit. Verhandelingen Bataviaasch Genootschap. Deel lxii. Tweede Druk bewerkt door N. J. Krom. 's Hage, 1920. *From the Publishers.*

Calcutta University. Journal of the Department of Letters. 3 vols.

—— Post-Graduate Teaching, 1919–20. Calcutta, 1920. *From the Publishers.*

Carpenter, J. Estlin, Theism in Medieval India. The Hibbert Lectures, 1919. London, 1921. *From the Hibbert Trustees.*

Casanova, P., Essai de Reconstitution Topographique de la Ville d'al Fousṭāṭ ou Miṣr. T. i, fasc. iii. Mémoires de l'Institut Français d'Archéologie Orientale du Caire. T. xxxv. Le Caire, 1919. *From the Publishers.*

Christensen, A., Xavāṣṣ-i-Āyāt. København, 1920. *From the Author.*

Clarke, C. Stanley, Indian Drawings. Mogul Paintings illustrating the Romance of Amīr Hamzah. Victoria and Albert Museum Portfolios. London, 1921. *From the Director.*

Cohen, Rev. A., The Babylonian Talmūd: Tractate Bᴱrākōt. Translated into English for the first time. Cambridge, 1921. *From the Author.*

Cuneiform Texts from Cappadocian Tablets. Pt. i, pls. i–l. London, 1921. *From the Trustees of the British Museum.*

Das, A. C., Rig-Vedic India. Vol. i. University of Calcutta, 1921. *From the Publishers.*

Davids, T. W. and C. A. F. Rhys, Dialogues of the Buddha. Translated from the Pali of the Dīgha Nikāya. Pt. iii. London, 1921. *From the Publishers.*

Edwards, C., The Hammurabi Code. 3rd ed. London, 1921. *From the Publishers.*

Epigraphy. Madras Government. No. 985, 1920.

Faddegon, B., The Vaiçeṣika-System described with the help of the oldest texts. Koninklijke Akademie van Wetenschappen. Deel xviii, No. 2. Amsterdam, 1918. *From the Publishers.*

Foster, W., The English Factories in India, 1655–60. Vol. x. Oxford, 1921.

—— Early Travels in India, edited. London, 1921. *From the Publishers.*

Gelder, J. M. van, Mānava Śrauta-Sūtra Cayana. Leiden, 1921. *From the Author.*

Geldern, R. v. Heine-, Gibt es eine austroasiatische Rasse?

—— Kopfjagd u. Menschenopfer in Assam u. Birma u. ihre Ausstrahlungen nach Vorderindien. Wien, 1917. *From the Author.*

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Goldziher, I., Le Dogme et la Loi de l'Islam, trad. de F. Arin. Paris, 1920. *From the Publishers.*

Grierson, Sir G., Index of Language Names. Linguistic Survey of India. Calcutta, 1920. *From the Secretary of State.*

—— Ishkashmi, Zebaki, and Yazghulami. An account of three Iranian Dialects. Prize Publication Fund, vol. v.

Halper, B., Post-Biblical Hebrew Literature. An Anthology, Text, and Translation. 2 vols. Philadelphia, 1921. *From the Publishers.*

Helfrich, O. L., Midden Maleisch. Supplement. (Běsěmahsch en Sěrawajsch Dialect) Verhandelingen Bataviaasch Genootschap. Deel lxiii, 1te stuk. 's Hage, 1921. *From the Publishers.*

Hill, S. C., Episodes of Piracy in the Eastern Seas, 1519 to 1851. Reprint from *Indian Antiquary*, vols. xlviii, xlix. Bombay, 1920. *From the Author.*

Hume, R. E., The Thirteen Principal Upanishads. Translated from the Sanskrit. London, 1921. *From the Publishers.*

Indian States, The, corrected to June, 1920. *From the Government of India.*

Krom, N. J., and Erp, T. van, Beschrijving van Barabudur. 1te Deel, met 2 Platen achter den texst en 442 Platen in-folio. Archaeologisch Onderzoek in Nederlandisch-Indië iii. 's-Gravenhage, 1920. *From the Minister for the Colonies.*

Legge, F., Philosophumena or the Refutation of all Heresies. Translated from the text of Cruice. 2 vols. London, 1891. *From the Translator.*

Liu Chai-Lien, The Arabian Prophet, a Life of Mohammed, a Chinese-Moslem work. Translated by I. Mason. London, 1921. *From the Publishers.*

Lopes, D., Anais de Arzila, Crónica inédita do Século xvi. Por B. Rodrigues. 1508–50. 2 vols. Lisboa. *From the Editor.*

Maspero, J., et Wiet, G., Matériaux pour servir à la Géographie de l'Égypte. Ser. i, fasc. ii. Mémoires de l'Institut Français d'Archéologie Orientale du Caire. T. xxxvi. Le Caire, 1919. *From the Publishers.*

Mees, W. Fruin-, Geschiedenis van Java. Deel ii. Weltevreden, 1920. *From the Publishers.*

Mélanges de la Faculté Orientale, Université St. Joseph. Vols. iii, fasc. i, ii; iv; v, fasc. i, ii; vi. Beyrouth, 1908–13. *From the Publishers.*

Milne, Mrs. Leslie, An Elementary Palaung Grammar. Introduction by C. O. Blagden. Oxford, 1921. *From the Publishers.*

Musée Guimet, Bulletin Archéologique. Fasc. i. Salle Ed. Chavannes. *From the Publishers.*

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Musée Guimet, Bulletin Archéologique. Fasc. ii. Asie Centrale et Tibet. Paris et Bruxelles, 1921. *From the Publishers.*

Nicholson, R. A., Studies in Islamic Mysticism. Cambridge, 1921. *From the Publishers.*

Parsee Punchayet Funds.

Buch, M. A., Zoroastrian Ethics. Baroda, 1919.

Dadabhai Bharucha, E. S., Collected Sanskrit Writings of the Parsis. Pt. v, Arda-Gvîrâ. Bombay, 1920.

Jhabvala, S. H., A Brief History of Persia. Bombay, 1920.

—— Sir Jamshedji Jeejeebhoy. Pamphlet. Bombay.

Nariman, G. K., Literary History of Sanskrit Buddhism from Winternitz, Lévi, Huber. Bombay, 1920.

Pithawalla, M., Sacred Sparks. Karachi, 1920.

From the Trustees.

Pelliot, Mission, Grottes de Touen-Houang. T. 3me. Grottes 72 a 111. Paris, 1920. *From the Publishers.*

Poona Oriental Conference, November, 1919. Proceedings, vol. i. Poona, 1920. *From the Publishers.*

Popper, W., Abû 'l-Maḥâsin ibn Taghrî Birdî's Annals. Vol. vi, pt. ii, No. 1. University of California Publications in Semitic Philology. Berkeley, 1920. *From the Publishers.*

Punjab Secretariat, Press Lists of Old Records. Vols. xi, xii, 1849–53. Lahore, 1920. *From the Secretary of State.*

Raychaudhuri, H., Materials for the study of the Early History of the Vaishnava Sect. Calcutta, 1920. *From the Author.*

Reckendorf, H., Arabische Syntax. Heidelberg, 1921. *From the Publishers.*

Reitzenstein, R., Das iranische Erlösungsmysterium. Bonn, 1921. *From the Publishers.*

Ross, E. N. MacBean, A Lady Doctor in Bakhtiariland. London, 1921. *From Miss I. M. Hayward.*

Roy, Rai Bahadur S. C., Principles and Methods of Physical Anthropology. Patna, 1920. *From the Author.*

Sale, G., The Korân translated into English from the original Arabic, with an introduction by Sir Denison Ross. London, 1921. *From the Publishers.*

Scheil, V., Recueil de Lois Assyriennes, texte et traduction. Paris, 1921. *From the Publishers.*

Sen, D. C., The Vaisnava Literature of Mediæval Bengal.

—— Chaitanya and his companions. University of Calcutta, 1917.

—— The Bengali Ramayanas.

—— The Folk Literature of Bengal. University of Calcutta, 1920. *From the Vice-Chancellor.*

Shah, Rev. Ahmad, Koran, Hindustani and Hindi Versions. 2 vols. *From the Translator.*

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Timur Nama, Badshah Nama, Shah Nama. Photographic Reproductions of Illustrations in MSS. at Bankipore. Ranchi, 1920. *From the Government of Bihar and Orissa.*

Trench, C. G. Chenevix, Grammar of Gondi. Vol. ii. Madras, 1921. *From the Author.*

Udham Singh, History of the Golden Temple at Amritsar, in Hindustani.

Westermann, D., A Grammatical Guide and numerous Idioms and Phrases for Beginners in the Ewe Dialect. Translated by C. D. Trotter. London, 1920.
From the Crown Agents for the Colonies.

Winstedt, R. O., Kitab Loghat Mělayu. Singapore, 1921.
From the Author.

Woolner, A. C., Introduction to Prakrit. Calcutta, 1917.
From the Author.

Pamphlets

Bilas Sarda, Har, Hammira of Ranthambhor. Ajmer, 1921.
From the Author.

Brandstetter, R., Wir Menschen der indonesischen Erde. Pt. i. Lucerne, 1921. *From the Author.*

Dandoy, Rev. G., Essay on Doctrine of the Unreality of the World in the Advaita. Calcutta, 1919. *From the Author.*

Furlani, G., L'anatema di Giovanni d'Alessandria contro Giovanni Filopono.

—— Gli "Impedimenta Matrimonii" secondo il Patriaca Nestoriano Timoteo I.

—— Un Recueil d'Enigmes Philosophiques en Langue Syriaque ed. et trad.

—— Una lettera di Giovanni Filopono all'imperatore Giustiniano tradotta dal siriaco e commentata. Reprints. 1919–21.
From the Author.

Gowen, Rev. H. H., Eschatology of the Old Testament.

—— Color Terms of the Old Testament.

—— Folk Lore of the Old Testament. Reprinted from Anglican Theological Review. Vols. ii, iii, 1919–21.
From the Author.

Schneider, A., Die Sumerische Tempelstadt. Staatswissenschaftliche Beiträge, Heft iv. Essen, 1920.
From the Publishers.

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1919 *GARSTANG, John, D.Sc., *Prof. of Arch., Univ. of Liverpool: Hilbre House, Freshfield, Lancs.*
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1910 *Gunawardhana, W. F., *Dept. of Public Instruction, Rose Villa Mt. Lavinia, Ceylon.*
1920 *Gupta, Babu Kshetro M., M.B., *Chief Med. Off., Mohishadal Raj, Bengal.*
1915 *Gupta, Kumud Bandhu Das, B.A., *4th Presidency Magistrate, 2 Bankshah St., Calcutta.*
1921 *Gupta, Pitam Lal, M.Sc., LL.B., *Prof. of Mathematics, Raja Ram College, Kolhapur.*
1917 *Gupta, Ramani R. Sen, *Vidyabinode, Jagajjyoti Office,* 1 *Buddhist Temple Lane, P.O. Bowbazar, Calcutta.*

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1910 *Gyi, Maung Maung, *Inspector of Excise, Opium Shop, Mandalay.*

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Hall, H. R., M.A., F.S.A., *British Museum, W.C. 1.*
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1920 *Haqq, Prof. Qazi Fazl-i-, M.A., *Govt. College, Lahore.*
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1921 Hayashi, H. E. Baron, *Japanese Ambassador, 10 Grosvenor Sq., W. 1.*
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1901 *Hill, Rev. J. R., *S.P.G. Mission, Banda, U.P.*
1913 Hill, S. C., *Ind. Educ. Serv.* (ret.), 36 *West Heath Drive, N.W.* 3.
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1921 Hobson, R. L., *British Museum, W.C.* 1.
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1918 *Hogg, J. Drummond, *H.B.M. Consular Service, British Legation, Bangkok, Siam.*
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1889 §Hopkins, Lionel Charles, I.S.O., *The Garth, Haslemere.*
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1920 *Iyengar, M. H. Krishna, *Educ. Dept., Mysore.*
1919 *Iyengar, Prof. T. R. Sesha, 65 *Coral Merchant St., Madras.*
1916 *Iyer, K. Ramaswami.

1906 *Jackson, A. V. Williams, LL.D., Litt.D., *Prof. Indo-Iranian Languages, Columbia University, New York, U.S.A.*
Hon. 1912 Jacobi, Dr. Hermann, *Geh. Regierungsrat, Sanskrit Prof.,* 59 *Niebuhrstr., Bonn, Germany.*
1920 *Jacob, Lt. H. E., K.A., 31 *Mountain Battery, c/o Lucknow House, Outram Rd., Addiscombe, Surrey.*
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1906 *KRENKOW, Fritz, *The Hawthorns, Quorn, nr. Loughborough.*
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1880 HON. 1902 LANMAN, Chas. R., *Prof. of Sanskrit, Harvard University,* 9 *Farrar St., Cambridge, Mass., U.S.A.*
1911 *LAUFER, Dr. Berthold, *Field Museum, Chicago, Ill., U.S.A.*
1914 *LAW, Babu Bimala C., B.A., *Zamindar,* 24 *Sookeas St., Calcutta.*
1901 *LEADBEATER, Rt. Rev. C. W., 4 *Raymond Rd., Neutral Bay, Sydney, Australia.*
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1899 §LEGGE, F., F.S.A., 6 *Gray's Inn Square, W.C.* 1.
1896 *LEIGH, Col. H. P. P., C.I.E., *Grosvenor House, Bath.*
1878 *†LEPPER, C. H.
1910 *LESNÝ, Dr. V., *Lecturer in Sanskrit, Prag University, Czechoslovakia.*
1880 †LE STRANGE, Guy, 63 *Panton St., Cambridge.*
1921 *LETT, H. N., D.F.C., *Queen's College, Oxford.*
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1897 *Lindsay, Rev. James, M.A., D.D., B.Sc., *Annick Lodge, Irvine, Ayrshire.*
1912 *Lipshytz, Rev. C. T., *Gorringe Park House, Mitcham, Surrey.*
1879 *Lockhart, Sir J. H. Stewart, K.C.M.G., *Commissioner Weihaiwei, N. China.*
1919 Longdon, Miss C. M., 124 *Osmaston Rd., Derby.*
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1915 *Lorimer, Miss F. M. G., *c/o Postmaster, Srinagar, Kashmir.*
1919 Loxton, S. E., *Icknield, Little Aston, nr. Sutton Coldfield, Staffs.*
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1909 *Lüders, Prof. Dr. H., 20 *Sybelstr., Charlottenburg, Berlin.*
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1918 *Lusy, Marino M., *Architect, Casa Lusy, via Lazzaretto Vecchio, No.* 11, *Trieste.*

1910 *Macartney, C. H. H., *Foxhold, Crookham, nr. Newbury, Berks.*
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1900 *Macdonald, Duncan B., *Theological Seminary, Hartford, Conn., U.S.A.*
1882 *†Macdonell, Arthur A., M.A., Ph.D., F.B.A., *Boden Prof. of Sanskrit, Fellow of Balliol,* 20 *Bardwell Rd., Oxford.*
1887 *McDouall, Wm., *Palmers Moor House, Iver, Bucks.*
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1921 *Maitra, Jogendra Nath, B.Sc., 58*a Colootola St., Calcutta.*
1921 *Maitra, Babu Ramesh C., *Zamindar, Natore, Rajshai, Bengal.*
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1921 *Majumdar, N. G., 70 *Russa Rd., N. Bhawanipore, Calcutta.*
1913 *Majumdar, Prof. Ramesh Chandra, M.A., *Calcutta University.*
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1916 *Manucha, Moti Lal, *Oudh Commercial Bank, Ltd., Fyzabad, U.P.*
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1910 *Simpson, Mrs. Alicia Hall, *c/o Sir C. R. McGrigor & Co.*, 39 *Panton St., W.C.* 2.
1914 *Simpson, Rev. D. C., M.A., *Manchester College, Oxford.*
1907 *Singh, Kahan, Sirdar of Nabha, *P.O. Mandi Phul, via Bhatinda, N.W. Railway.*
1914 *Singh, Lala Gulbahar, M.A., LL.B., *Prof. of Sanskrit, Govt. College, Lahore, Panjab.*
1902 *†Singh, Raja Pertab Bahadur Singh, C.I.E., *of Tiraul, Partabgarh, U.P.*
1917 *Singh, Sahibzada Bhagat Lakshman, *Govt. High School, Rawalpindi Panjab.*
1920 *Singh, Sahibzada Sher, M.Sc., *Asst. Div. Forest Off., Jammu & Kashmir State.*
1895 *†Sinha, Kunwar K. Pal, *Raio Kotla, P.O. Narki, Agra, U.P.*
1921 *Sinha, Prof. M., B.A., 30 *Park St., Calcutta.*
1920 *Sinha, Babu Manoranjan, *Asst. Settlement Officer, Chupra, B. & O.*
1913 *Sinha, Babu Rudra Datta, M.A., LL.B., *Vakil, High Court, Lucknow, U.P.*
1920 *Sircar, Babu Ganopati, Vidyaratna, 69 *Beliaghatta Main Rd., Calcutta.*
1920 *Sirkar, P., M.A., 180 *Up. Circular Rd., Calcutta.*
1920 *Sitaram, K. N., B.A., *Research Scholar, Univ. of Madras.*
1921 *Sitaraman, Kadayam R., B.A., B.L., *Insp. of Police, Saidapet, Madras.*
1900 *Skeat, W. W., 17 *Coombe Rd., Croydon.*
1921 *Smart, J. E., B.A., M.C., C.M.G., 34 *Albemarle Av., High West Jesmond, Newcastle-on-Tyne.*
1921 *Smith, Capt. P. F., M.C., *Wadham College, Oxford.*
Hon. 1909 Snouck Hurgronje, Prof. C., *Witte Singel 84a, Leiden, Holland.*
1907 Soane, Maj. E. B., C.B.E., *c/o H. S. King & Co.*, 9 *Pall Mall, S.W.* 1.
1915 *Som, Atul Chandra, B.A., *Land Acquisition Officer, Chaibasa P.O., Singbhum.*
1920 *Sonpur, H.H. Maharaja Sri Sir Bir Mitrodaya Singh Deo, Dharmanidhi, K.C.I.E., of, *Sonpur Feudatory State, Sonpur Raj P.O., via Sambalpur.*

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1912 *Sood, Babu Hira Lal, *Sub-Judge, Kotah, Rajputana.*
1920 *Soothill, W. E., M.A., *Prof. of Chinese, 11 Norham Rd., Oxford.*
1910 *Spooner, D. B., Ph.D., *Asst. Director Gen. Arch. Survey, Benmore, Simla.*
1908 *Spooner, Mrs. D. B., *Benmore, Simla.*
1918 *Srikantaiya, S., B.A., B.L., *Bangalore, Madras.*
1920 *Srinivasachari, C. S., M.A., *Prof. of History, Pachaiyappa's College, Madras.*
1910 *Staël-Holstein, Baron A. von, *c/o Peking Club, Peking, China.*
1919 *Stanton, J., *High St., Chorley, Lancs.*
1907 *Stapleton, H. E., I.E.S., *c/o Director Public Instruction in Bengal, Writers' Buildings, Calcutta.*
1909 *Stark, Herbert A., *Additional Asst. Director Public Instruction Bengal, Writers' Buildings, Calcutta.*
1904 *Steel, Mrs., *Roycot, Stansted, Essex.*
1887 *§Stein, Sir Aurel, K.C.I.E., Ph.D., D.Litt., D.Sc., *Supt. Ind. Arch. Survey, c/o Postmaster, Srinagar, Kashmir.*
1916 *Stephen, Sir Harry Lushington, 6 *Rosary Gdns., S.W. 7.*
1905 *Stevens, George F. A., *Sultanabad, Persia.*
1921 *Stevenson, W. B., D.Litt., *Prof. of Hebrew & Semitic Languages, 7 College Court, The University, Glasgow.*
1912 *Stewart, J. A., I.C.S., *c/o T. Cook & Son, Rangoon, Burma.*
1906 *Stokes, H. G., C.I.E., I.C.S., *c/o Chief Sec. to Govt., Madras.*
1915 Storey, C. A., *The Library, India Office, S.W. 1.*
1919 Stringer, E. W., *The Café, Lymm, Cheshire.*
1918 *Subrahmanya, Palamadai P., Sastri, B.A., *Cathedral P.O., Madras.*
1917 *Suryanarayanam, Satalur S., *Lalagraharam, Madura.*
1893 *†Svasti Sobhana, H.R.H. Prince, *Bangkok, Siam.*
1921 *Swinson, R. F. G., B.A., *St. Stephen's House, Oxford.*
1895*†§Sykes, Brig.-Gen. Sir Percy Molesworth, K.C.I.E., C.B., C.M.G.

1910 *Tabard, Rev. Father A. M., *The Cathedral, Shoolay, Bangalore.*
1921 *Taggart, W. Q., I.C.S., *c/o The Secretariat, Rangoon, Burma.*
1915 *Tagore, Babu Kshitendra Nath, B.A., 6/1 *Dwarkanath Tagore Lane, E. Gate, Jorasanko, Calcutta.*
1875 *†Tagore, Raja Bahadur Sir Sourendro Mohun, C.I.E., Mus.D.
1912 *Tahoor, Gholam, *Interpreter, High Court, 44b Police Hospital Rd., Calcutta.*
1896 *Takakusu, Jyan, Ph.D., 902 *Sendagaya, Tokyo, Japan.*
1897 *Talbot, Walter Stanley, C.I.E., *c/o H. S. King & Co., 9 Pall Mall, S.W. 1.*
Hon. 1910 Tallqvist, K. L., *Prof. of Oriental Literatures, Fabriksgasse 21, Helsingfors, Finland.*
1921 *Tambe, G. C., B.A., LL.B., *Sec. to Maharashtrya Manakosh M. Ltd., Council Hall, Nagpur, C.P.*
1913 *Tampyah, T. Isaac, *Barr.-at-Law, 18 Beach St., Penang, Malay Peninsula.*
1914 *†Tampi, Vatasseri Sri Velayudhan, son of H.H. Maharaja of Travancore, *Trivandrum, Travancore.*

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1912 *Tannan, Mohan Lall, *Barr.-at-Law, Sydenham College Hostel, Chami Rd., Bombay*, 4.
1916 *Tantraratna, Nutu G., *Lalgola P.O., Murshidabad, Bengal.*
1897 *Tate, George P., *Ind. Survey Dept. St. Quentin, Naini Tal, U.P.*
1893 *Taw Sein Ko, C.I.E., K.-i-H., I.S.O., *Peking Lodge, West Moat Rd., Mandalay, Burma.*
1911 *†Teape, Rev. Wm. Marshall, M.A., *South Hylton Vicarage, Sunderland.*
1879 *§Temple, Lt.-Col. Sir Richard C., Bart., C.B., C.I.E., F.S.A., Director, *The Nash, Worcester.*
1898 *Thatcher, Rev. G. W., M.A., *Camden College, Sydney, N.S.W., Australia.*
1920 *Thin, Maung Po, *Extra Asst. Commissioner, Pegu, Lower Burma.*
1921 *Thirtle, Rev. David G., 23 *Borthwick Rd., E.* 15.
1905 *Thirtle, James Wm., LL.D., 23 *Borthwick Rd., E.* 15.
1917 *Thomas, E. J., M.A., *Under Librarian, University Library, Cambridge.*
1898 §Thomas, F.W., Ph.D., Hon. Secretary, *Librarian, India Office, S.W.* 1.
1918 Thompson, Sir Herbert, Bart., *The Old House, Aspley Guise, Beds.*
1907 *Thompson, J. P., I.C.S., *c/o Grindlay & Co., 54 Parliament St., S.W.* 1.
1919 *§Thompson, R. Campbell, M.A., F.S.A., *Milburn Lodge, Boar's Hill, Oxford.*
Hon. 1909 Thomsen, Prof. Dr. Vilhelm, *St. Knuds Vej* 36, *Copenhagen, Denmark.*
1899 *§Thomson, H. Lyon, F.S.A.
1880 *†Thorburn, S. S., *Bracknell House, Bracknell, Berks.*
1912 *Thornton, H. A., *Supt. N. Shan States, Lashio, Burma.*
1903 *Tilbe, Rev. H. H., Ph.D., *Amer. Baptist Mission, Riverview, Ahlone, Burma.*
1921 *Tin, Hpay Maung, *Exeter College, Oxford.*
1921 *Tolkowsky, S., *Tel-Aviv, Jaffa, Palestine.*
1895 *†Travancore, H.H. Sri Padmanabha Sir Rama Varma Maharaja Raja Bahadur, G.C.S.I., G.C.I.E., of.
1921 *Trench, C. G. C., I.C.S., *Commissioner of Settlements & Lands Records, Nagpur, C.P.*
1917 *Tripathi, Prof. Deva Datta, Sahityacharya, *Patna College, Bankipore, B. & O.*
1918 *Tripathi, Pandit Ram P., *Reader in Modern Ind. Hist., The University, Allahabad, U.P.*
1921 *Trollope, Rt. Rev. Mark N., *Bishop in Corea, Eng. Ch. Mission, Seoul, Corea, via Japan.*
1912 *Troup, James, *c/o Patrick Cooper & Son, 259 Union St., Aberdeen.*
1919 *Trumper, Lt.-Commander V. L., R.N.R. (ret.), *Hon. Sec. Palestine Exp. Fund, Maison Perrin, Port Said.*
1902 *Tsain, Moung, *Pegu, Lower Burma.*
1900 *Tuckwell, Rev. John, 1 *Onslow Gdns., N.* 10.
1912 *Turner, Prof. R. L., *Sigrā, Benares, U.P.*
1919 *Turner, Capt. Vere E., *c/o Thomson, Lehzen & Co., Ltd., Chartered Bank Buildings, Calcutta.*

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1882 *Udaipur-Mewar, H.H. Maharajdhiraja Maharana Sir Fateh Singh, Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., Maharana of, *Rajputana.*
1919 *Ui, Prof. H., *c/o Sōtōshū Daigaku Komanzawa Mura, Tokyo-fu, Japan.*
1920 *Urdhwareshe, Waman Gopalrao, M.A., 34 *Krishnapura, Indore City, Cent. India.*

1919 *Vaishya, Ramji D., F.R.S.A., *Sweet Cottage, Gwalior.*
Hon. 1898 Vajirañāna, H.R.H. Prince, *Pavaranivesa Vihāra, Bangkok, Siam.*
1920 *Varma, Gopi N. S., *Zamindar, Mohalla Quanungoyam, Bereilly, U.P.*
1921 *Varma, Sheo Prasad, M.A., *Prof. of English, Robertson Coll., Jubbulpore.*
1884 *†Vasudev, Mādhav Samarth, R. R., B.A.
1913 *Vidyābhūsana, Pandit Upendranath, M.A., *Sr. Prof. of Sanskrit, City College, Calcutta.*
1921 *Viran, S. S. Guana, 1 *York House, Guilford Pl., W.C.* 1.
1905 *Vogel, Prof. J. Ph., Ph.D., *The University, Leiden, Holland.*
1899 Vost, Lt.-Col. W., I.M.S., 26 *Crystal Palace Pk. Rd., S.E.* 26.

1908 *Wackernagel, Prof. Dr. Jakob, *University of Basle, Switzerland.*
1892 *†Waddell, Lt.-Col. L. A., C.B., C.I.E., LL.D., I.M.S., *c/o H. S. King & Co.*, 9 *Pall Mall, S.W.* 1.
1914 *Wahid, Maulvi Syed Abdul, M.A., *Prof. Mayo College, Ajmer.*
1912 *Wahshat, Raza Ali, Sahib-i-Diwan, 2/1/2 *Dilkusha St., P.O. Ballygunge, Calcutta.*
1919 Waite, Mrs. A. R., 8 *Mount Park Crescent, W.* 5.
1920 *Waley, A., *Print Room, British Museum, W.C.* 1.
1912 *†Walker, Rev. C. T. Harley, M.A., 28 *Warnborough Rd., Oxford.*
1921 Wallace, G. Malcolm, 31 *Holmwood Rd., Bromley, Kent.*
1907 *Walsh, E. H. C., C.S.I., I.C.S., *Member Bd. of Revenue, Bankipur,* 14 *Linton Rd., Oxford.*
1912 *War Office. *Officer in Charge, Far Eastern Sub-section, Whitehall, S.W.* 1.
1919 Warburton, Rev. B. A., 90 *Billinge Rd., Spring Bank, Wigan.*
1921 *Ward, Lt. J. F., *Selwyn College, Cambridge.*
1916 *Wardrop, Oliver, C.M.G., M.A., *Brit. Consulate Gen.*, 29 *Rue Erckmann-Chatrian, Strasbourg, France.*
1914 *Warming, Gen. P. L. E., *Bangkok, Siam.*
1907 *Watson, H. D., I.C.S. (ret.), *Upper Gates, Ryder Hill, Guildford.*
1900 *Weir, T. H., B.D., *Rockcliff, Bouling, Dumbartonshire.*
1921 Weld-Blundell, H., 17 *Ovington Sq., S.W.* 3.
1921 *Welingkar, Ramchandra N., *Wadham College, Oxford.*
1921 *Wernham, J. W. K., M.C., *Wadham College, Oxford.*
1921 *Westlake, A. R. C., *Tremellyn, Mevagissey, Cornwall.*
1882 Whinfield, E. H., 63 *Beulah Hill, S.E.* 19
1906 *Whitehead, R. B., I.C.S., *Lahore.*
1921 Whymant, A. N. J., 90 *Thornton Av., W.* 4.
1919 *Wickham, H. T., *Ind. Police, Bank House, Bawtry, Yorks.*
1899 *Wickremasinghe, Don M. de Zilva, *Sch. of Oriental Studies, Finsbury Circus, E.C.* 2.

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1911 *Wijewardene, Don Richard, *Rickman House, Colpetty, Colombo, Ceylon.*
1916 *Wilberforce-Bell, Maj. H., *c/o Cox & Co., Rue Jeanne d'Arc, Rouen, France.*
1913 *Wilder, Rev. G. A., M.A., D.D., *Chicore Mission Sta., Chipinga P.O., Melsetter Dt., Rhodesia, S. Africa.*
1921 *Williams, Miss D. D., 6 *Norham Gdns., Oxford.*
1915 *Williams, L. F. Rushbrook, B.A., B.Litt., O.B.E., *c/o Home Dept., Govt. of India, Simla.*
1919 Willis, G. de L., *Leconfield Estate Off., Ennis, Co. Clare.*
1921 Willoughby-Meade, G., *c/o N. Brit. & Mercantile Ins. Co., Ltd., 60 Watling St., E.C. 4.*
1919 Wills, J. T., 6 *Mortlake Rd., Kew.*
1919 *Winckworth, Chauncey, *Fitzwilliam Hall, Cambridge.*
1912 *Winstedt, R. O., D.Litt., *Asst. Director of Ed., Kuala Lumpur, Fed. Malay States.*
1876 †§Wollaston, Sir Arthur N., K.C.I.E., *Glen Hill, Walmer, Kent.*
1896 *Wood, J. Elmsley, 4 *Glenista Gdns., Edinburgh.*
1907 *Woodley, Rev. Edward C., *American Mission Seminary, Marash, Turkey in Asia.*
1919 *Woolley, Capt. C. Leonard, R.F.A., *Uplands, Bathwick Hill, Bath.*
1909 *Woods, Prof. Jas. H., Ph.D., *Harvard University, 179 Brattle St., Cambridge, Mass., U.S.A.*
1906 *Woolner, A. C., M.A., 11 *Racecourse Rd., Lahore.*
1900 *Workman, Mrs. Bullock, *c/o Amer. Exp. Co., 6 Haymarket, S.W. 1.*
1894 *Wright, H. Nelson, I.C.S., *Firwood, Clevedon, Somerset.*
1920 *Wynch, Lionel M., C.I.E., C.B.E., I.C.S. (ret.), *Pine Hill, Camberley, Surrey.*
1919 *Wynter, A. E., M.D., M.R.C.S., L.R.C.P., 26 *Oakfield Rd., Clifton, Bristol.*

1919 *Yahuda, Dr. A. S., 45 *Brondesbury Rd., N.W. 6.*
1911 *Yazdani Mas'udi, Ghulam, *Supt. of Arch., Nizam's Dominions, Hyderabad, Deccan.*
1921 *Yellin, David, M.B.E., *Sicron Moste, Jerusalem.*
1921 *Yetts, Maj. L. M., M.C., *c/o Civil Commissioner, Baghdad, Mesopotamia.*
1910 §Yetts, W. Perceval, O.B.E., *Jr. United Service Club, Charles St., S.W. 1.*
1913 *Yusoof, S. Azhar, *Yusoof Manzil, Civil Lines, Gaya, Bengal.*
1921 *Yusuf, Md., M.A., *Head Master, Calcutta Madrasah, Calcutta.*
1895 Yusuf-Ali, Abdullah ibn, C.B.E., I.C.S., M.A., LL.M., *c/o King, King & Co., Bombay.*

1913 *Zimmermann, Rev. Robert, S.J., *St. Xavier's Coll., Cruickshank Rd., Bombay.*
1920 *Zutshi, Pandit Chand N., *Rais, Asst. Ed. "Hitavada," Happy Cottage, Morar, Gwalior State.*

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1893 Professor Henri Cordier, *Paris.*
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1918 Monsieur A. Foucher, *Paris.*
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1920 Professor Theodor Nöldeke, *Karlsruhe.*
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1910 Professor K. L. Tallqvist, *Helsingfors.*
1909 Professor Vilhelm Thomsen, *Copenhagen.*
1898 H.R.H. Prince Vajirañāna, *Bangkok.*

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1897 Professor E. B. Cowell.
1900 E. W. West.
1903 Sir William Muir.
1906 G. U. Pope.
1909 G. A. Grierson.
1912 J. F. Fleet.
1915 Mrs. Agnes Smith Lewis.
1915 Mrs. Margaret Dunlop Gibson.
1918 V. A. Smith.

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Athenæum Club.
Bâle : Bibliothèque de l'Université.
Baltimore: Johns Hopkins University Library.
Baltimore : Peabody Institute.
Bangkok : Vajirañāna National Library.
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Benares : Queen's College.
Berkeley, U.S.A. : Pacific School of Religion.
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Brighton : Public Library.
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Calcutta : Imperial Library.
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Calcutta : Madrasah.
Calcutta : Presidency College.
Calcutta : Ripon College.
Calcutta : Sanskrit College.
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Calcutta : University Library.
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Chicago : Hibbard Egyptian Library.
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Egmore, Madras : University Library.
Ernakulam : State Museum of Cochin.
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Geneva : Bibliothèque Publique.
Geneva : League of Nations.
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Gwalior State : Inspector of Archæology.
Harrow School : Vaughan Library.
Harvard College Library.
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Kanazawa, Japan : Fourth High School.
Khartoum : Director of Education.
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Lahore : Dyal Singh Library Trust.
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Lahore : Panjab Public Library
Lahore : Panjab University.
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Liverpool : Institute of Archæology.
London Library.
London : Science Library.
Louisville, U.S.A. : S. Baptist Theological Seminary.
Lucknow : Canning College.
Lucknow : Provincial Museum.
Lucknow : Public Library.
Lund : Kungl. Universitets Biblioteket.
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Madras : Connemara Public Library.
Madras : Kumbakonam College.
Madras : National College of Commerce.
Madras : Oriental Manuscripts Library.
Madras : Presidency College.
Manchester : Free Reference Library.
Manchester : John Rylands Library.
Manchester : Lancashire Independent College.
Manchester University.
Manila : Bureau of Science.
Maynooth : St. Patrick's College.
Meadville, U.S.A. : Alleghany College Library.
Melbourne : Victoria Public Library.
Michigan University.
Minneapolis Athenæum.
Montreal : McGill University.
Muzaffarpur : Greer Bhumihar Brahman College.
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Mysore : Government Oriental Library.
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New York : Missionary Research Library.
New York : Public Library.
New York : Union Theological Seminary.
Niigata : Koto-Gakko.
Ottawa : Library of Parliament.
Oxford : Indian Institute.
Oxford : St. John's College.
Paris : Banque Industrielle de Chine.
Paris : Institut de France.
Patna : B. & O. Research Society.
Pavia : Università.
Pennsylvania : Bryn Mawr College.
Peshawar : Archæological Survey, Frontier Circle.
Philadelphia : Commercial Museum.
Philadelphia Library Company.
Pittsburg : Carnegie Library.
Pittsburg : Western Theological Seminary.
Poona : Archæological Survey, Western Circle.
Poona : Fergusson College.
Princeton : Theological Seminary.
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Tokyo : Dr. G. E. Morrison Library.
Tokyo : Noshomu.
Tokyo : Shūkyo-daigaku Library.
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SUMMARY

	July 1, 1920.	June 1, 1921.
Resident Members	128	153
Resident Compounders	17	8
Non-resident Members	575	632
Non-resident Compounders . . .	63	62
Library Members	2	1
Honorary and Extraordinary Members .	24	27
	809	883
Subscribing Libraries, etc. . . .	143	169
Total . . .	952	1052

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The Organization of Statistics.

The Presidential Address of Sir R. Henry Rew, K.C.B., for the Session 1920–21. Delivered to the Royal Statistical Society November 16, 1920.

It is no light responsibility—and no small honour—to be called to the Chair of a Society which for eighty-six years has filled an important place in national life and maintained a high standard of public usefulness. The President of the Royal Statistical Society inherits traditions handed down through a long line of distinguished public men, and at this stage in the Society's history he may well feel some trepidation lest he fail to rise to his high calling and falter in handing on the torch to his successors.

It gratifies me to claim that I am in the direct line of Presidential descent from two of my predecessors—Sir James Caird (President, 1880–82) and Major Craigie (President, 1902–04). It was on Sir James Caird's motion that the House of Commons in 1864 resolved, against the Government of the day, in favour of the establishment of a system of official agricultural statistics, which at a later date was greatly developed by Major Craigie. Both Sir James Caird and Major Craigie, like myself, spent a part of their lives in the Civil Service, and both, like myself, were not only concerned with agricultural statistics, but also had charge for a time of the work of the Land Commission which was incorporated in 1889 with the Board of Agriculture.

This is, in effect, the first Presidential address to the Society since the war. My immediate predecessor, Sir Herbert Samuel, took office in June, 1918, and his Presidential address, although delivered after the armistice (in January, 1919), was still too near

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the suspension of the hostilities for a review of the war period. Indeed it is not yet possible to review the war period with any pretension to historical detachment. The fog of war still lingers, and we have as yet only faint glimpses of what we fondly hope is a brighter day. But it is at least possible, from the point of view of the Society, to take stock of the position in which the war has left us.

The Society in the war period.

During the war the Society "carried on" with difficulty. At the outbreak of the war its small staff was crippled by the departure of the Assistant Secretary, now Captain Kohan, O.B.E., and a little later by the joining up of the junior clerk (Mr. Smalley). The Librarian, Mr. Mackenzie, was, fortunately for the Society, ineligible for military service, and the honorary secretaries, with the assistance of several members of the Council, were able to keep the Society going. The issue of the *Journal* was restricted to four instead of eight parts, and in other respects the work of the office was reduced; but it was not until the Society, in 1918, was able to secure the services of Miss Thorburn, the present Assistant Secretary, that the normal routine of the office could be fully resumed. The difficulties were increased by the fact that the demands on the library were increased during the war by the requirements of various Government departments. It may fairly be claimed that the library accumulated by the Society during its long history—which forms, as Fellows of the Society are aware, the most complete collection of statistical returns and publications in the country—was of national service during the war by providing ready access to information urgently required by the Government in relation to questions of trade, population and finance in the belligerent and other countries. To no institution can greater distinction be given than the privilege of having been found useful to the nation during the war, and this distinction the Society may honestly claim.

The Society finds itself in very respectable company as regards the effect of the war on its finances. It has certainly not "profiteered," as the following statement of its membership and investments at the end of each year shows :—

	Number of Fellows on December 31.	Amount invested on December 31.		Number of Fellows on December 31.	Amount invested on December 31.
1913	846	10,092	1917	757	7,656
1914	821	9,528	1918	761	8,282
1915	772	8,182	1919	796	7,672
1916	758	7,702			

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Happily the present year has been marked by an unusually large accession of new Fellows, and there is no doubt that the membership roll on December 31 will show a total not less than that of the year before the war.

From financial loss the Society may, and I believe will, recover, but it has suffered other losses which are irreparable. No less than five Fellows of the Society who had filled this Chair have died since 1914—Earl Brassey (President, 1879–80), Mr. Charles Booth (President, 1892–94), Lord Courtney of Penwith (President, 1897–99), Sir Richard Martin (President, 1906–07), and Lord Welby, who died during his Presidency in 1915. Amongst others whom death has removed from the roll of Fellows during the past six years were Mr. Samuel Whitbread, who joined the Society as long ago as 1859, Mr. Joseph Chamberlain, Lord Jersey, Lord Rhondda, Sir Robert Mowbray, Sir R. Inglis Palgrave, Sir Lesley Probyn, Sir Henry Burdett, Archdeacon Cunningham, Sir Richard Crawford —an old colleague of mine at the Board of Agriculture—and Mrs. Frances Wood, who was the first woman to serve on the Society's Council.

The changes in the *personnel* of the honorary offices have been unusually numerous since 1914. At the outbreak of war the exigencies of the public service compelled my resignation of the position of hon. secretary, which I had been privileged to occupy for thirteen years, though I retained, until called to the Chair, the position of hon. foreign secretary, which was practically a sinecure during the war. The vacancy in the treasurership caused by the death of Sir Richard Martin was happily filled by the acceptance of the position by Mr. R. Holland-Martin. Mr. Udny Yule, who succeeded me as senior hon. secretary, was compelled by ill-health to resign the position in 1918, and in the present year Dr. Stevenson also found it necessary to resign his position as hon. secretary. The Society, if I may be permitted the somewhat invidious remark, has from its earliest days been fortunate in enlisting the services of Fellows who have devoted themselves zealously as hon. secretaries to its executive work, but I venture to say that it has never been more fortunate than in the present holders of the position—Mr. Flux, Dr. Greenwood and Sir Josiah Stamp.

If there was inevitably some slackening in the normal activities of the Society during the war, it has since the armistice, and especially during the Session of 1919–20, demonstrated that its vitality is unimpaired, and its zeal for statistical progress unabated.

In December, 1916, the Council revived the question, which

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has from time to time aroused the Society's interest, of a centralized organization of official statistics, and this was followed in 1919 by the appointment of a Committee, under the Chairmanship of Mr. Geoffrey Drage, which promoted a Memorial to the Government on the subject. Following a practice begun in 1840, the Council appointed a Committee, under the Chairmanship of Professor Bowley, to make suggestions for the forthcoming Census. This Committee presented a detailed Report, which was forwarded to the Government in December last, and it is understood that effect will be given to some of their recommendations. The Committee reiterated the request which the Society has made on many previous occasions for a quinquennial census, and it is satisfactory to record that the principle is now embodied in the statute. It may be of interest to note that the demand for a quinquennial census was first made by the Society in 1879. That after forty years importunity is rewarded, may be taken as a lesson to impatient spirits not to weary in well-doing. The institution of the Frances Wood prize, in memory of one whose services to statistics and to the Society well merit commemoration, the establishment of a register of applicants for statistical appointments, and the revision of the Library Catalogue, may be noted as recent signs of activity. But the Session of 1919–20 will be distinguished in the Society's annals as that in which for the first time the Council and Fellows in the mother-country were able to welcome a number of statisticians from other parts of the Empire, who were in London attending the British Empire Statistical Conference. Three of them—Mr. G. H. Knibbs, Mr. Findlay Shirras and Mr. E. H. Godfrey—contributed Papers during the Session, and others attended meetings and took part in the discussions. The Council seized the opportunity to entertain them at a dinner, which was attended by many Fellows of the Society, while at meetings of the Conference and elsewhere many occasions occurred for intercourse between those animated by similar ideals, and united in common effort throughout the Empire.

Looking forward.

I have dealt thus far with our domestic concerns, but this episode—or, as I would rather say, this landmark—in the Society's history leads naturally to the broader considerations which I desire to bring to your notice. This is a testing-time for all institutions; it is a time for the searching of hearts. No organization, no system, however well-established and however honourable its record, can escape questioning. It must justify its continued existence under

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the new conditions of life, and prove its adaptability to the post-war environment. We are all in favour of a progressive policy, but it is not sufficient to advocate progress in the abstract. At the risk of being thought frivolous in reference to a serious subject, I venture to recall the familiar story of the excited traveller who jumped impetuously into a jaunting-car in Ireland (in the days when humour still lived there), saying, "I'm in a terrible hurry—drive like the devil." The jarvey immediately flogged his horse into a headlong gallop. "Where are you going?" shouted the traveller. "I don't know," said the jarvey, "but anyway I'm driving like the devil." I suggest that in greater affairs it is well to drive vigorously, but it is also wise to know the direction.[1]

I propose, therefore, to consider the relation of statistics and of statistical organization to existing social, political and economic conditions. In doing so it is necessary to make certain broad assumptions—which may no doubt be regarded in some quarters as questionable—such as the continuance of a civilized order of human society, organized in self-governing communities who are willing to maintain relations for the mutual exchange of commodities, and aiming, each in its own way, at the improvement of its economic position and the increased happiness and well-being of its members. If, as some think, we have reached an epoch in the world's history when the clock of civilization is to be put back, and the nations hitherto in the foremost files of time are to revert to a state of servitude under despotic governments, any present speculations on the future of statistics would be futile. In that event, at any rate, Presidential addresses will cease from troubling and the Society will be at rest.

[1] In this connection the view of a high authority on the subject is pertinent: "Perpetual change, which doubtless always means adaptation "to the environment, in no way implies what man calls progress. Even "within the brief space of human experience recorded by history there have "been centuries in which whole nations have quite obviously retrograded: "losing in a generation or two the painful accumulations of past ages in "manners and morals, in arts and sciences, and in productive capacity; "sometimes, indeed, altogether succumbing to such non-human forces of "Nature as famine and disease, or to such human forces as the superior "penetrative capacity of lower races. Whole civilizations have in this way "perished from off the earth, leaving progress to be begun again elsewhere, "at a lower level, from which men start once more to climb the painful secular "stages. Whether or not human society in Great Britain will continue to "advance or will slip back to a lower level—whether, indeed, European "civilization can even survive its present difficulties—depends essentially on "man's power to control the environment to which he must, perforce, become "adapted or perish."—*A Constitution for the Socialist Commonwealth of Great Britain.* By Sidney and Beatrice Webb, 1920.

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National statistics.

Let us, however, on the assumption that we remain a free nation with a civilized social order, examine briefly the position of statistics and of statistical organization in Great Britain. Before doing so, I digress for a moment to glance at the economic situation of the country at the present time, as compared with the pre-war period. Of course, anything like a complete analysis is impossible in a short space, but one or two significant figures may give a general indication of the position now and immediately before the war.

And first as to the progress of population during a period in which all the factors—births, marriages, deaths, emigration and immigration—were violently dislocated. Dr. Stevenson has been good enough to supply me with the following estimates of the population at the middle of the years 1914, 1919 and 1920[1] respectively :—

Mid year.	United Kingdom.	England and Wales.	Scotland.*	Ireland.†
1914	46,089,249	36,960,684	4,747,167	4,381,398
1919	46,156,077	36,800,000	4,894,077	4,462,000
1920 (provisional)	47,000,000	37,608,900	4,921,100	4,470,000

* No allowance made for movement of Scottish troops overseas.

† The movements of the military are taken into account in these estimates.

The net gain in the population of the United Kingdom during the six years was therefore about 1,000,000, or about 2,000,000 less than it would have been if the decennial rate of increase between 1901 and 1911 had continued.

It might perhaps be succinctly said that our economic position as a nation depends on coal, shipping, textiles, iron and steel, and

[1] Since the address was delivered, Dr. Stevenson has kindly supplied the following statement of the estimated population of the United Kingdom at mid-year, 1920 :—

	United Kingdom.	England and Wales.	Scotland.	Ireland.
Males....	22,400,600	17,814,100	2,317,500	2,269,000
Females	24,558,400	19,795,500	2,546,900	2,216,000
Persons	46,959,000	37,609,600	4,864,400	4,485,000

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that we buy food and raw materials with coal, manufactured articles, and shipping services. The following comparison of quantities of certain articles imported and exported in the nine months ending September, of 1913 and 1920 respectively, gives a rough idea of our oversea trade. The figures are in thousands of tons :—

	Nine months ending September		Increase (+) or decrease (−).	
	1913.	1920.		
Imports.	Thousand tons.	Thousand tons.	Thousand tons.	Per cent.
Iron ore	5,774	5,195	− 579	− 10
Iron pyrites	601	459	− 142	− 24
Manganese ore	444	327	− 117	− 26
Raw cotton	546	657	+ 111	+ 20
Raw wool	311	317	+ 6	+ 2
Raw jute	211	182	− 29	− 14
Grain and flour	8,190	6,818	− 1,372	− 17
Meat	885	928	+ 43	+ 5
Butter	160	66	− 94	− 59
Cheese	84	108	+ 24	+ 29
Sugar (entd. for home consumption)	1,296	903	− 393	− 30
Exports.				
Coal	54,518	19,852	− 34,666	− 64
Coal shipped for steamers in foreign trade	15,541	10,730	− 4,811	− 31
Iron and steel and manufactures thereof	3,751	2,551	− 1,200	− 32
Machinery	514	316	− 198	− 39
Ships (gross tonnage)	400	292	− 108	− 27
Cotton yarns	69	53	− 16	− 23
	Thousand yards.	Thousand yards.*	Thousand yards.	
Piece goods	5,350,279	3,428,070	−1,922,209	− 36
Woollen tissues	81,997	113,820	+ 31,823	+ 39
Worsted tissues	47,705	47,042	− 663	− 1·4
Linen piece goods	142,307	64,828	− 77,479	− 54
	Dozen pairs.	Dozen pairs.	Dozen pairs.	
Boots and shoes	1,089,120	623,816	−465,304	− 43

* The figures in 1920 are given in square yards and have been converted to lineal yards for comparison. They must be regarded as only approximate.

If these figures can be regarded as indicative, it is evident that we have a long way yet to go before our external trade reaches its pre-war volume.

I quote from the Bulletin of Statistics issued under the direction of our senior honorary secretary, on behalf of the Supreme Economic Council, one or two figures (in thousands of metric tons) of average monthly production in the United Kingdom :—

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	Monthly average.		Increase (+) or decrease (−).	
	1913. Thousand metric tons. (000's omitted).	1920. Thousand metric tons (000's omitted).	Thousand metric tons (000's omitted).	Per cent.
Coal	24,344,	19,863,	− 4,481,	− 18
Pig iron	869,	718,	− 151,	− 17
Crude steel	649,	811,	+ 162,	+ 25

It should be noted that the monthly average for 1913 is an average for the whole year, while that for 1920 is for eight months only.

As agriculture has an important relation to the economic position of the country, I give a summary for Great Britain of acreage under crops and the number of farm live stock in June, 1914, and in June, 1920 :—

	June, 1914.	June, 1920.	Increase (+) or decrease (−).	
	Thousand acres.	Thousand acres.	Thousand acres.	Per cent.
Arable land	14,294	15,396	+ 1,102	+ 7·7
Wheat	1,868	1,932	+ 64	+ 3·4
Other corn crops	4,548	5,395	+ 847	+ 18·6
Potatoes	614	707	+ 93	+ 15·1
Clovers, &c.....	3,863	3,881	+ 18	+ 0·5
Small fruit	85	67	− 18	− 21·2
Other crops	2,968	3,414	+ 446	+ 15·0
	Number (thousands).	Number (thousands).	Number (thousands).	
Cattle	7,093	6,711	− 382	− 5·4
Sheep....	24,286	19,725	− 4,561	− 18·8
Pigs	2,634	2,123	− 511	− 19·4

In general terms we may say that while agriculture has fairly maintained its pre-war position, with some loss of live stock, trade and industry have still a large amount of leeway to make up.

No apology is needed to this Society for the intrusion of statistics in any connection, but in fact this digression is not so irrelevant as it may appear. It suggests two comments : first, that the economic position of the country makes the need all the greater for adopting every possible means of perfecting our statistical organization ; and secondly, that our national statistics of production and output fall far short of the standard required for a country which depends, not only for prosperity but even for its existence, on the maintenance of production at its maximum. How shall we know what the maximum under changing conditions is, or what are the extent

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and causes of a deficiency, unless the official machinery for the collection and analysis of the requisite statistics is adjusted to that end?

One other point, relevant to my subject, is suggested by the figures for imports and exports. Month by month, as, with exemplary promptitude and punctuality, the Trade and Navigation Accounts appear, they form the subject of journalistic comments. How often have we seen complacent comments on the satisfactory expansion of our external trade, in some instances noting that it exceeds previous records. It is quite true that the total value of our exports in the first nine months of this year exceeded that of the corresponding period of 1913 by 616,000,000*l.*, but this is, of course, no indication of trade recovery, but only of inflated values.

Such elementary errors are, of course, innocuous in the circles frequented by Fellows of this Society, but the general public are more easily misled. It has been said that the war was won by statistics. There are many claimants for that honour, and statisticians may be entitled to join the throng, although personally I adhere to the belief that our sailors and soldiers, backed by the indomitable spirit of the whole Empire, gave us victory. But however that may be, there is no doubt that during the war the interest of the public in statistics increased enormously. When they grasped the fact that their weekly allowance of food was dependent on elaborate calculations of world supplies, they began to think, for the first time, that statistics had some direct contact with their daily life. The public, naturally, are unable to discriminate, and any figures placed before them are accepted, although they may have no sound statistical basis. If it were possible to bring home to the public the rudimentary truth that while anyone may make guesses, statistics in any true sense of the term can only be produced if the proper machinery for their collection is provided, we might hope to enlist public opinion—by which in the last resort we are governed—in support of the demand which this Society has so long pressed for improved machinery and adequate resources in the statistical service of the country.

I do not intend to dwell on the alleged defects of official statistics. There are two reasons for my abstention from this attractive field of discussion. The subject was very faithfully dealt with by Sir Charles Dilke in his Presidential address of 1907, when he displayed his genius for analysis in an examination of Government returns which might have brought a blush to the cheek of the most hardened bureaucrat—if that were possible. Other Fellows of the Society, such as Mr. Geoffrey Drage, Professor Bowley and others, have

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expatiated on the same interesting theme. There is, therefore, little more I could say, but if there were, I am not the person to say it. I have only within the last few months ceased to be incriminated. For many years I was responsible for a section of official statistics, and I still feel reluctant either to confess my own sins or to call special attention to the sins of others. If I might presume to speak for Government statisticians I would say that, conscious as we were of one another's deficiencies, and possibly even of our own, we sometimes thought that our critics were not equally conscious of our difficulties. For my part I own to a feeling of relief at my escape from a position in which one was constantly asked apparently simple statistical questions, to which no honest reply was possible because the necessary data had not been collected. The Israelites were not more relieved when Pharaoh let them go than I was to relinquish the task of making statistical bricks with an insufficiency of financial straw.

The real question, as indeed all the critics have freely acknowledged, is not the present defects of official statistics or the delinquencies of official statisticians, but the deficiencies of the existing system and the inadequacy of the available resources. The Society has long recognised this, and from time to time various suggestions for improvement have been made on its behalf. For a long time the establishment of a central statistical commission on the lines of those established by Belgium in 1841, by Prussia in 1860, by Austria in 1863, by Italy in 1872, by Norway in 1876, and by the Netherlands in 1892, was the proposal generally supported. In his Presidential address at the Jubilee meeting of the Society in 1885, Sir Rawson Rawson described the ideal to be aimed at as the appointment by the Government "of some superior body, "council or commission to organize the collection, abstraction "and publication of the official statistics, not only of the United "Kingdom, but of the Empire." Still earlier, in 1871, Mr. Purdy, who was an official statistician himself, but was also an honorary secretary of this Society, recommended the establishment of a department "which should be an intermediary between Parliament "and the various Government offices." Successive committees of the Society on the Census, made recommendations bearing on the subject, but mainly in connection with an improvement of the arrangements for dealing with demographic statistics. In the Presidential address already mentioned, Sir Charles Dilke revived the proposal for a comprehensive statistical office, in these words:—

"The most pressing need is that we should hand over to a "Statistical Department those statistics which are collected by

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"various departments in the course of administrative work, and "of which the publication is not necessary for the purpose of "administration. This Statistical Department should arrange such "statistics (except those purely administrative) as are collected "by other departments . . . . A mere meeting of statisticians "from the various departments, to form an advisory committee, "would in my judgment be an insufficient result of our labours. "A permanent statistical direction is, I think, required. The "Treasury is the department which ought to bring about reform, "but it seems to shrink from creating an office to do work that "should have been taken up long ago. To advocate a true statistical "direction of national statistics is doubtless a 'counsel of perfection,' "the object sought being important to the country, but, like most "great ends, difficult of accomplishment. Want of co-ordination in "the work of the various offices is obvious, and is not denied; but, "save for the efforts of the Board of Trade, now redoubled under "Mr. Lloyd George as President, we do not adopt a remedy."

In 1909, with the view of pressing the subject on the attention of Parliament, Sir Charles Dilke arranged that I, as senior honorary secretary of the Society, should give evidence before the Select Committee of the House of Commons on Publications. This I did at some length, but the Committee in their Report (285 of 1909), after referring to my evidence, stated that "the question of the "reduplication of official statistics and of the feasibility of securing "greater co-ordination in their publication has frequently arisen in "an incidental manner," and that they were "struck with the "fact that this question had not received greater attention since "the enquiries conducted by the Official Statistics Committee "appointed by the Treasury in 1877, and by the further depart-"mental committee appointed in 1890 to enquire into certain "questions connected with the taking of the Census," but added that the question was not within the terms of their reference. They did not explain why in that case they took evidence about it, but I think the reason might be found in the pertinacity of Sir Charles Dilke and his persuasiveness with the Chairman of the Committee.

In 1916 Sir Bernard Mallet, in his Presidential address on "The "Organization of Registration and its Bearing on Vital Statistics," referred briefly to the subject, and expressed an opinion that no real improvement could be looked for without "establishing some "form of central control and supervision."

Mr. Geoffrey Drage, at the December meeting of the same year, brought the subject comprehensively before the Society in a Paper on "The Re-organization of Official Statistics and a Central

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"Statistical Office." His treatment of the whole question was characterized on the critical side by Draconian severity, and on the constructive side by what he will pardon me for terming Dragian thoroughness. I shall make no attempt to summarize his paper, but would recommend its perusal, or re-perusal, to all who are interested in the subject.

In January, 1917, the Council passed a resolution "favouring "the establishment of a centralized organization and control of "the statistical work of the Government," and in June, 1919, a committee was appointed "to consider the best method of approach-"ing the Government with a view to effecting an improvement in "the collection and presentation of official statistics." This committee prepared a memorial to the Government, which represented "the urgent need of a reorganization of the present system of "official statistics as the foundation of a proper system of civil "intelligence, in the first place for the United Kingdom, and in the "second place for the British Empire," and urged that a Royal Commission or Parliamentary Committee should forthwith be appointed "to enquire into the existing methods of the collection "and presentation of public statistics and to report on the means "of improvement."

It may be thought that a belief in the efficiency of a commission or committee as a means of attaining the object in view evinces somewhat unexpected simplicity on the part of a Society which has had long experience of the ways of Governments. It is over forty years ago since the Government of the day appointed a strong committee to enquire and report on official statistics. The committee were not unanimous, but the report signed, as Sir Charles Dilke remarked, by "weighty names such as those of Childers, "Ritchie, Welby and Arthur Balfour," recommended the appointment of a small central statistical department subordinate to the Treasury, which should be charged with the preparation of the annual abstracts; with the editing of a miscellaneous volume of statistics; with the compilation of an annual index to Parliamentary returns and other returns; and with the performance of such statistical duties then performed by the Board of Trade as are not directly connected with the administration of the Board of Trade; and that they should settle the form of statistics, or rather that when a form of statistics had been settled it should not be altered without reference to them. The committee also suggested that the head of the central statistical department should be temporarily associated with a person of position having the requisite qualifications and time to go through the statistics of each depart-

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ment with the statistical officer of that department. They thought that might be done in the course of a year, and that after this preliminary work was completed there should be a small permanent board or commission to carry on the supervision of statistics, and to secure "a continuance of order and harmony in the general "body of returns presented to Parliament." Two of the six members of the committee (Mr. Shaw Lefevre and Mr. Farrer) dissented, Mr. (afterwards Lord) Farrer, then Secretary to the Board of Trade, taking the objection that the committee had not had sufficient information before it, and considering generally that the recommendations were unworkable. It is possible he may have had other reasons which he did not think it necessary to mention.

It is of interest to note, in passing, that of the six members of that committee three were, at one time or other, Presidents of this Society, and that two of these formed the dissentient minority.

In view of the fact that successive Governments have ignored the recommendations of this committee, it requires some faith to propose the institution of a similar enquiry. There are, however, sound reasons for the adoption of this course. The cynical idea that the appointment of a commission or committee of enquiry denoted the shelving of a question on which the Government did not intend to take action was never fully justified, but in any case it should now be abandoned in favour of the more up-to-date theory that a commission or committee is appointed after the Government has decided to take action, and that its appointment may even expedite action, in advance of its report.

There are two sufficient reasons for the course which the Society has adopted. The first is that while the Society is committed generally to the opinion that something should be done, there is no unanimity in its Council, and still less in the whole body of Fellows, as to the precise means by which the problem may best be solved. The second reason is, that the question of the best means of improving the organization of statistics in this country is one of extraordinary complexity, and the most careful and thorough enquiry—which only the Government can effectively undertake—is necessary before a practical scheme for immediate adoption can be suggested.

From the history of this question, which I have briefly summarized, it emerges that the case for reform in the past has been largely based on the existence of certain defects and anomalies in the national statistics, and the belief that the establishment of a new department or office would entirely remove them. Without

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necessarily maintaining that perfection would be immediately attained by the adoption of this course, I am convinced that the case for a general overhaul of official statistical machinery, and for some drastic measure for securing co-ordination and preventing duplication of effort and overlapping of duties, is much stronger at the present time than ever before. One difficulty at least to which Sir Charles Dilke referred has diminished. He suggested that a reason for Government inaction was that they shrank from "creating an office." We may reasonably believe that in these days this shrinking is less pronounced.

I have already referred to the public avidity for statistics. This is naturally reflected in the Government departments, with the result that every self-respecting Ministry has now a statistical section. This evidence of official recognition of the importance of statistics in the work of administration is naturally gratifying to the Society, but it is evident that there is an increased risk that some of these sections may be simultaneously doing the same work. I am not to be betrayed into circumstantial evidence, but I may refer to what occurred in the excitement of war conditions. At the outbreak of war everyone was eager to help in every conceivable way, and enthusiastic Civil Servants were keen to do their own work all day and the work of someone else all night. It happened to be my job, with the help of the Board of Trade, to look after statistics of food supplies for a Cabinet Committee of which our respective Chiefs were members. Both the Board of Agriculture and the Board of Trade had had experience of such statistics for a good many years, and we fancied that between us we could supply Ministers with all the information that was obtainable. But I soon found that two or three other departments had started to compile food supply statistics on their own account. I discovered this from urgent appeals from distracted officials who telephoned to members of my staff asking for some information as to the best means of setting about the job. One of them, I remember, was surprised and relieved to find that this country had collected annual returns of its agriculture for fifty years. To do them justice, they manfully tackled the unfamiliar subject, discovered by enquiry some of the chief sources of statistical information, and I have no doubt produced for the edification of their Chiefs, intelligent and interesting statistical statements of the present and prospective food supplies of the country. It is possible that it was a friend in one of these departments who furnished Colonel Repington with the curious figures of wheat supplies which he recorded in his vivacious diary,[1]

[1] *The First World War.* By Colonel Repington, C.M.G., 1920.

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though I doubt if even from that source he would have obtained the novel suggestion that a quarter of wheat represents 320 lbs.

I am far from commenting harshly on excess of zeal in war-time, and I do not aver that such unnecessary duplication of work exists at the present time, but I suggest that the multiplication of Government offices increases the risk of this happening, and greatly strengthens the case for the adoption of some measures to prevent it, and to ensure that the statistical work of the State is properly allocated between the departments, so that there is no overlapping or duplication. There is much now left undone which urgently needs doing, a mass of information which the Government ought to have and does not now possess. It would be exasperating to think that time, energy and money are spent on duplication of work which could be devoted to work now left undone. That is one point for an enquiry.

In a memorandum handed in by the Secretary of the Board of Trade to the Dominions Royal Commission (Cd. 7351) a list was given of nineteen principal departments in the United Kingdom, other than the Board of Trade, which prepared and published statistics. The list is certainly longer now, and it may be noted that at the British Empire Statistical Conference in the present year the representation of the statistics of the United Kingdom was divided between officers of twenty-four different departments. Mr. Drage, in a fervour of optimism, suggested, in the Paper I have already mentioned, that the statistics of the United Kingdom might all be entrusted to seven departments.

The case for a thorough and authoritative enquiry by a competent and representative Royal Commission appears to me to be unchallengeable, and in so saying I confidently believe that I express the unanimous opinion not only of the Council but of the whole body of Fellows. Perhaps it would be wiser to leave the matter there, but I venture to add one or two observations on my own account, based on a certain amount of experience of official statistics at home, some knowledge of statistical organization overseas, and a consideration of the subject extending over a good many years.

First, I would remark that not all the figures collected by departments come within the scope of what we know as statistics. The publications of the Society, as well as of the International Statistical Institute, are sprinkled with definitions of statistics, and I shall avoid lengthy extracts and discussion by confining myself to this dogmatic statement. Next, I would suggest that to divorce the collection of statistics from administration is unsound in theory and impossible in practice. The returns of

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imports and exports are an obvious example, but I would rather refer to those statistics with which I am best acquainted. How could an Agricultural Department effectively carry on its work without statistics collected under its own supervision? There are, of course, some kinds of statistics which are strictly incidental to administration. For instance, an agricultural department does not deliberately set out to count the number of pigs affected with swine fever, but in the course of administering the Diseases of Animals Acts it necessarily obtains that information.

In undertaking any enquiry designed to ascertain facts in numerical form concerning the economic or social relations of the people—which is, I take it, the primary function of statistics as we recognize the term—there are five definite stages, viz. :—

1. Organization of the machinery of collection, including the appointment and supervision of the enumerators or collectors.
2. Arrangement of the schedule or "questionnaire."
3. Examination, tabulation and analysis of the returns.
4. Explanatory and elucidatory comments on the results.
5. Form of publication.

In the Report of the Machinery of Government Committee (Cd. 9230) it is suggested that a Department of "Research and "Information"—also described as "Intelligence and Research"—should be established, and it is indicated that "methods of statistical "enquiry and the presentation of statistical results" would come within its scope. I hesitate to criticise the report of a committee of such notable strength and authority, and I attribute to my own deficiencies the fact that I am unable to visualise clearly the precise relationship between the Intelligence or Information Department and other departments, in regard to the statistics contemplated by the committee. They refer to the point I have already made as to the number of departments now collecting statistical material, and add :—

"A more complete enumeration of the administrative depart-"ments within which statistical work is performed would only "serve to emphasize the number of authorities concerned and the "absence of systematic arrangements for maintaining inter-commu-"nication between those who are likely to be engaged upon the "consideration of identical or similar material for the purpose "of drawing deductions as well as for the purpose of meeting "current administrative requirements."

And the committee also say :—

"A Minister in charge of an administrative department must "have at his disposal, and under his control, an organization

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"sufficient to provide him with a general survey of existing know-"ledge on any subject within his sphere, with tables of statistics "and comments upon such tables which will keep him in touch "with the progress of any work that can be expressed in this "form."

It appears to be contemplated, therefore, that each department would retain its own statistics—under any new scheme of the reorganization of departments and the definition of their functions —and would be responsible for all the stages of work which I have just enumerated, except possibly the fifth, *i.e.*, form of publication.

Assuming this to be so, I would point out that there still remains much which could be done to improve the present position without impairing the responsibility of the several departments for the statistical work coming within the ambit of their administrative duties. In attending, as a visitor, some of the meetings of the British Empire Statistical Conference I could not help thinking that a United Kingdom Statistical Conference was even more urgently required, and would serve an equally useful purpose. I believe that periodical conferences of the statistical officers of all the departments concerned, if they were authoritatively convened and properly regulated, would be extremely useful, the more so if they included a representation of non-official statisticians. Such a consultative or advisory statistical council, if given the necessary status and responsibility, could, in my judgment, do much to co-ordinate official statistics and effect substantial improvements in their preparation and publication. But while I would advocate this as a first step, I agree with Sir Charles Dilke that something more than this is necessary. A fully-equipped Central Statistical Office is desirable, competent not only to advise, but charged with the responsibility of passing for publication all statistical returns and reports of sufficient importance which are presented to Parliament or published. Whether such an office should form part of a department of Intelligence and Research is a question which I need not discuss, but it should be given, *vis-à-vis* the departments, a position of independence, and within defined limits, of authority. Such an office might properly, and perhaps advantageously, incorporate the present Census Office, and indeed (though this is probably a counsel of unattainable perfection) the three Census Offices of the United Kingdom. Demographic statistics, by their nature, are extra-departmental. However public business is arranged, no department can claim an exclusive interest in the census of population. These statistics are, in one part or another, necessary to all departments, and cut across all branches of administration.

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I spoke at the outset of the uncertainty of political developments in this country, and none can foretell either the duration of the present Government or the complexion of Governments which will follow it. I have no fear for the future if the people are fully informed; I have great fear if they suspect that they are not fully informed. There are ominous signs that the confidence of the public in the trustworthiness and honesty of official statistics has diminished. If it were once generally thought that statistical truth might be tampered with in the interests of policy, the foundation of Government would be shaken. That, looking to the vague contingencies of the political future, is a matter of deep import. Because it seems to me imperative to nip suspicion in the bud, the establishment forthwith of an independent authority, free from departmental control or influence, which shall take the ultimate responsibility for the publication of all the main statistical facts affecting the life of the community, is urgent and vital.

Imperial statistics.

Statistics, like charity, begin at home, and I have dwelt so long, and I fear so discursively, on domestic matters, that I have little time left for the consideration of statistical affairs outside these islands.

I have already referred to the British Empire Statistical Conference, which in accordance with a suggestion made by the Dominions Royal Commission, of which our colleague Sir Alfred Bateman was a distinguished member, was convened by the Board of Trade, and met in January and February under the judicious Chairmanship of our senior honorary secretary, Mr. Flux. The Report of the Conference (Cmd. 648) is, of course, familiar to all the Fellows of the Society. I confess a regret that reasons of public economy will prevent, as I understand, the publication of a full report of the proceedings, which would have been of great interest to all persons concerned in statistical progress. To the paramount need for economy we all submit, though we naturally think that economy might be better practised in regard to matters in which we are less interested.

The proposal, elaborated with much care and thought, for the establishment in London of a British Empire Statistical Bureau was the foremost product of the Conference, but the deliberations of the assembled statisticians also resulted in a large number of detailed suggestions for the improvement and co-ordination of statistics within the Empire, many of which may be immediately fruitful.

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This Society has from time to time supported in general terms the idea of an Imperial Statistical Office, and I am justified in saying, on behalf of the Society, that we earnestly hope the scheme, in its main outlines, put forward by the Conference will shortly materialize. I cannot help thinking that the establishment of the proposed bureau would have wider implications than are involved in an improvement of Imperial statistics, important as that is. A corporate permanent body set up with specific functions, in which political and constitutional issues are not involved, and representing the Mother-country, the Dominions, India, and the Crown Colonies, would be a step in the direction of that Imperial unity of purpose and effort which the war has so greatly developed, and peace will, we hope, consolidate. The opinions of our oversea brethren on this subject have been unequivocally expressed, and it is earnestly to be hoped that no unforeseen difficulties will arise to impede the realization of so desirable an object.

International statistics.

Outside the British Empire the social and administrative disorder which prevails over a large part of Europe seriously affects international statistics. The International Statistical Institute, established under the auspices of this Society as the direct outcome of its Jubilee meeting, has for thirty-five years been the most representative body of the statisticians of the world. Having members in all belligerent countries, its proceedings were inevitably interrupted by the war; but fortunately, at the last meeting of the General Assembly held in Vienna in 1913, a project for the establishment of a permanent bureau at the headquarters of the Institute (happily situated in a neutral country), which had been under consideration for some time, was adopted. Since 1915 the permanent bureau has issued an Annuaire in six parts, four of them devoted to demographic statistics, one comprising statistics relating to wages, hours of labour, employment, strikes and lock-outs, and another including statistics of agriculture, posts, telegraphs, co-operation, housing and prices. During the present year the bureau has commenced the publication of a monthly bulletin, of which two parts have appeared, containing statistics of prices, cost of living, and unemployment.

The International Agricultural Institute has from the first devoted great attention to the statistical side of its work, and its annual and monthly publications of statistics of crops are widely known.

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Last year the Supreme Economic Council commenced the publication of a monthly bulletin of statistics of population, trade and shipping, price movements, finance, labour, &c., which is prepared in this country by the Board of Trade.

The International Labour Office, established under the Peace Treaty, is to collect information with regard to "all matters "affecting industrial life and labour." I confess that I find it difficult to name any field of statistical enquiry which might not plausibly be brought within this definition. It may be assumed, however, that the statistics which would be regarded as coming specifically within the scope of the Labour Office will be those relating to wages and employment, although obviously statistics of production, supplies and prices, intimately concern industrial life and labour, from the workers' as well as from the employers' point of view.

In the international, as well as in the national sphere, we are in some danger at present from excess of zeal. The importance of fuller and more exact information, in a systematized numerical form, of the world's economic position and progress is now universally recognized. There is serious risk, however, that eager attempts to satisfy this "felt want" may result in diffusion of energy, wasteful overlapping and general disorder. The collection and publication of statistical information is a function of Government, and thanks very largely to the work of the International Statistical Institute, and latterly also of the International Agricultural Institute, there are now very few civilized nations which do not admit the responsibility and make some effort to discharge this duty. If Governments should fail there is no doubt that private enterprise would step in, for statistics are becoming more and more essential to those engaged in international trade and commerce. I recently had submitted to me through one of our most distinguished Fellows, a scheme for the establishment of a central office for certain international statistics, to be supported not by Governments but by private individuals, and we know that enterprises of this character already exist in some countries.

Many of us have fixed our hopes, in statistical as in other matters, on the League of Nations. Hopes have been deferred, but I, at any rate, though, I admit, with some abatement of confidence, still believe that the development and co-ordination of international statistics may be best achieved through the agency and under the guiding influence of the League. The problem is, however, complicated, and excess of zeal, to which I have already referred, might easily render it insoluble in our times. Any attempt at coercive

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centralization would, in my judgment, be disastrous. The function of the League in relation to statistics is primarily, and at the present time, co-ordination. It should build on existing foundations, rather than construct new edifices. Some day we may, if we live long enough, see the completion of a comprehensive statistical office, representing the "Federation of the World"; but it will not be yet, and any premature attempt to found it will retard and not accelerate the achievement of that ideal. We who believe in the ideal must be content to see that any steps we now take lead in the right direction without forcing the pace. In these impatient days counsels of caution are always unpopular, but the League of Nations has already proved that it possesses the essential quality of patience, and if it is to fulfil its high mission in the sphere of statistics it will need much patience as well as great discretion.

Conclusion.

A Presidential address is by our practice not submitted to referees, and is exempt both from criticism and closure. I have already taken merciless advantage of this position, but I have still a final word to say about the Society. I believe firmly that it has before it a further career of public usefulness of even greater and more vital importance than before. However the statistical services of this country may be reorganized, they must be inspired and invigorated by having—I will not say at their back (which is ambiguous), but alongside and keeping step with them—an appreciative, watchful and well-informed public opinion. It is the function of this Society to assist in forming this public opinion. The public by itself cannot discriminate between good and bad statistics, or to be more accurate (because there are properly no bad statistics), between what are statistics and what are merely figures. The Society has also the duty of doing its utmost to encourage the use of statistics and to prevent their abuse. How it may best fulfil this function and perform this duty is, I submit a matter for our earnest consideration. I have already indicated that the Society has shown renewed vigour since the war, and in my belief it must pursue a policy in the future consonant with the rigorous and searching times which are upon us. Thus only will it continue to justify its existence as a needful factor in the economic and social life of the community.

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Proceedings on November 16, 1920.

Sir Alfred Bateman: Ladies and gentlemen, it is my privilege to be called upon to propose to you a hearty vote of thanks to our President, Sir Henry Rew, for his inaugural address. To me it is a very great pleasure to see Sir Henry Rew in that Chair. I think it is twenty years, at least, since I was intimately associated with him. There was a Government Committee appointed to go into certain questions of Tiends and Fiars prices in Scotland. I think Sir Henry and I were the only two men on that Committee who were not Scotsmen and who did not know what Tiends and Fiars prices were. Sir Henry Rew was secretary of the committee, and even on the first day in Scotland he concealed his ignorance; in a very few days he had no ignorance to conceal. We were together some time then. Two years afterwards I was a member of the Royal Commission on Food Supply in Wartime, and we got Sir Henry Rew to give evidence. Without invidious comparison, I think his evidence was about the most important and valuable which was given before that Commission, and it was largely owing to that evidence that the work of the Commission proved to be very useful in the early stages of the recent war. There is only one thing I regret, that is that he has told us he has now ceased his connection as a permanent official. But our consolation is this, that, with the double work he was doing before, he could hardly have taken the position of President if he had not become one of us "decayed" officials. Sir Henry Rew has divided his address really into two parts. I entirely agree with what he says about the Society, that is, it has never been more wanted than it is now, since it supplies an impartial and scientific investigation of economic and statistical questions before they get into the hands of the politicians. We know these subjects have an impartial discussion here, and I think we may be thoroughly pleased and satisfied with the position of the Society after these five years of war. Then as regards the other part, namely, the Organization of Statistics, Sir Henry has very properly reminded us that no criticism is allowed of the president's address. It is an old rule; it is coeval with the Society, and I think it is a rule that ought to be observed. I shall therefore not tell you how I differ in some respects from the President as regards the difficulties which may arise in the various schemes of organization. I think, however, that you ought to realise that even under the present regime there is an immense improvement on the old ways. Fifty years ago I remember so well there were fewer statistical departments, but at the same time they were much more prickly. No self-respecting statistical Department was on speaking terms with any other. The greatest example was the Board of Trade and the Customs. They were both concerned in those important

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trade accounts, the monthly accounts and the yearly accounts; and I remember well that long letters used to pass, official letters which became very abusive sometimes, on such questions as what countries and articles should be included in the export and import accounts. I remember as a young man I proposed that instead of this official correspondence we should have a personal conference between one official of the Board of Trade and one from the Customs; in fact I was called revolutionary, and if the term "Bolshevist" had been known, I should have been called a young Bolshevist; but in the course of a very few years we had a personal conference which has I understand gone on ever since with excellent results. If you have a personal conference in regard to statistics which are much used by the public, they are assisted, as Sir Henry Rew says, by the presence of non-official members, and I think such a system goes a long way to meet the present position. What we want is more co-operation between the different authorities and certainly no overlapping. We do not want a multiplication of departments asking the public for very much the same instruction. I daresay you all find, as I did in my time, that it is so much more easy to construct a statistical form than to fill it up; and what I found, in going through the Empire a few years ago, was that there were a great many complaints of half a dozen almost similar forms being received, asking for facts which had been supplied in other ways to the authorised departments in England. I think we should avoid that by any sort of co-operation we can have, and if need be, by a Commission. As regards the International Statistical Institute, at which I have been present in all the early Congresses, it has done excellent work, mainly, I think, by the promotion of intercourse between the departments in the various countries. I am afraid I am not very enthusiastic about the permanent bureau at the Hague. It seems to me that if we have the League of Nations and the other international statistics which are issued, it is too much a fifth wheel to the coach to have the departments at the Hague issuing, in the name of the International Statistical Institute, the statistics which it has not originated, but has simply obtained by more applications and more questions. But otherwise I hope, when the effects of the war are over, the Statistical Institute will meet again and will continue to perform useful duties. I am sorry to have detained you so long, ladies and gentlemen, but I feel very strongly that we owe a great debt of gratitude to our President, Sir Henry Rew, and I beg to be allowed to move a hearty vote of thanks to him.

Sir Athelstane Baines: I have much pleasure in seconding this vote and in associating myself with all that Sir Alfred Bateman has said about our new President. I have had the good luck, on most of the too rare occasions lately, when I have been at these meetings, to have been given the opportunity of adding my tribute of grateful appreciation of one or another of my old colleagues. I have been associated with Sir Henry Rew on this Society for about

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a quarter of a century, and feel, like the rest of us, that we could not have had a more friendly or helpful co-adjutor. It is an added pleasure, too, that this occasion should mark the completion of a fulfilled prophecy—not mine, but Major Craigie's. When I took over from him one of the Hon. Secretaryships, he told me that he had just introduced a new member who was going to be of the greatest service to us, and would be a good successor to the Secretaryship when the time came for me to retire from it. The Major, being from Scotland, is presumably gifted with second sight, and I am sorry he cannot be here to-day to see his forecast come true. Sir Henry Rew has now taken out the statistical Field Marshal's baton which, we know, lies at the bottom of the office-box of our Hon. Secretaries, and he will wield it, we are assured, to the same advantage to our Society as has resulted from his long connection with us in other capacities. His accession to the Chair is particularly opportune now that the subject of his Address is likely to be brought to the fore in practical politics. Official statistics have to be organized by people who know both how to use them and how they can be collected, and our President has had long experience in both branches. Whilst, then, we congratulate him upon having attained the highest position the Society can confer, we must also congratulate ourselves upon being represented by a statistician as trustworthy, well known and popular as the new President. I beg to second the vote of thanks.

The resolution was carried unanimously.

The PRESIDENT: I am extremely obliged to Sir Alfred Bateman and Sir Athelstane Baines for the very kind terms in which they have moved this vote of thanks. They are much too flattering to me. Sir Athelstane referred to a prophecy which had been made when I first entered the Society some years ago. To tell you the honest truth, those who introduced me to the Society, and those with whom I have been on such friendly terms since I joined the Society, including the proposer and seconder of the vote of thanks, were in a large degree able to assist in the fulfilment of their own prophecy. It is owing to their kindness and by their help and counsel when I was a young Fellow of the Society, that I have been enabled to render any service to the Society or to attain the honourable and distinguished position I occupy this afternoon. Amongst any successes I have achieved in life, I did not know until to-day that I once succeeded in concealing my ignorance of a subject from Sir Alfred Bateman. I am not going to detain you at this stage of the proceedings except to thank you for the vote of thanks that you have so kindly passed. I am conscious that in some remarks I have made I may not have carried with me the opinion of all the members of the Society, or of all the members of the Council. The subject of my address, in my belief, needs the most anxious consideration, and I should be the last to attempt to dogmatise about

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it; nor, I am quite certain, would any fellow of the Society, nor the Council itself, attempt to lay down, here and now, definite proposals for immediate adoption. All I venture to say on behalf of the Society is, that they are, I believe, unanimous in asking the Government to look into the question and to look into it in a competent way. Beyond that, I hope I have not suggested that we are in agreement amongst ourselves as to what is the right course for the Government to pursue, though we are in complete agreement that the subject is, at this time in particular, of such importance to the country as a whole, and has reached such a stage that it is necessary that the Government should seriously and at once take it up and look into it from an impartial point of view. I confess that I was tempted, as President, to wave the red flag and indulge in the revolutionary proceeding of inviting discussion on the Presidential Address. But imagination staggers at what might happen to the Society if that course were adopted; and I therefore conclude by expressing again my heartiest thanks for the kindness with which you have received my address.

Mr. A. Hoare: Will you kindly tell us what "Tiends and Fiars prices" are?

The President: "Tiends" is the Scots for tithes, and "Fiars prices" are prices struck at what is called a Fiars court, and are in fact practically equivalent to what we know as corn averages.

The following Candidates were elected Fellows of the Society:—

J. A. S. Adam.
S. K. Aiyar, M.B., C.M.
B. G. Bhatnagar, M.A.
E. P. Booth.
Rev. J. R. Brown.
James Byrne.
S. A. Cudmore, B.A.
M. H. Desai, B.A., LL.B.
S. Evans.
W. R. Fairbrother.
D. Ghambashidze.
L. B. Green.
A. W. Kenyon.
F. W. Lawe.
W. A. C. Lothian.
J. E. McCulloch.
R. C. Master, B.A.
M. Matin-uz-zaman Khan.
Maung Mein Maung, M.A., LL.B.
W. H. Myles, M.A.
W. R. Nicholson.
R. S. Patil, B.A., LL.B.
T. R. Roberts.
F. M. Smith, M.A., Ph.D.
Philip Snowden.
J. B. Tayler.
S. P. Turin.
J. H. Waddington.
Lieut.-Col. M. Wayman, O.B.E.
F. J. Winchester.

Corporate Representatives.

P. G. Cambray, *representing* the Reference Library of the National Unionist Association.
W. G. Perrin, *representing* the Board of Admiralty.
H. L. Woollcombe, *representing* the Charity Organization Society.

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The Maturing Debt.

By Sir Drummond Drummond Fraser, K.B.E.

[Read before the Royal Statistical Society, December 14, 1920, the President, Sir R. Henry Rew, K.C.B., in the Chair.]

Maturing debt has been replaced by Treasury bills during the six years ending March. This policy has resulted in an increase of Treasury bills, according to the chart A and table (pages 49 and 50), of 618,000,000*l.* The Exchequer receipts and payments of Treasury bills for half this period, viz., three years, ending March, are :—

Year ending March.	Receipts.	Payments.
	Million £.	Million £.
1918	2,788	2,278
1919	3,747	3,751
1920	3,146	2,995
	—	9,024
Increase in three years	—	657
	9,681	9,681

Since March, maturing debt is to be replaced by an increased scale of taxation this year and next year by 534,000,000*l.* and in a normal year by 180,000,000*l.* A normal year assumes a reduction of 300,000,000*l.* on special receipts and charges. It also assumes that the Excess Profits Duty is brought to an end.

The object of my paper is—firstly—to show the evil of replacing long-dated debt by short-dated debt and the danger of replacing debt by excessive taxation ; and—secondly—to suggest a practical banking solution of the problem.

The continuous rise in wholesale and retail prices shown by the chart A is a conclusive proof of the undesirable effects of the lack of a sound Government borrowing policy.

In the first period of three-and-a-half years ending September, 1917, the Government borrowed half the home money on a *credit* basis as follows :—

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	£
Treasury bills (net)	936,000,000
Bank overdraft	224,000,000
War Loan subscriptions by banks	300,000,000
	1,460,000,000
Other money borrowed including cash equivalent of 150,000,000*l.* War Loan stock cancelled	2,114,000,000
	3,574,000,000

The practical result of balancing half of the home expenditure by the artificial manufacture of credit is seen in the continuous rise of the curves representing wholesale and retail prices during this period. This adds to the purchasing power of the country without increasing purchasable goods and services.

In the second period of one-and-a-half years ending March, 1919, the Government by a direct appeal to the people (National War Bonds + Savings Certificates) borrowed the whole of the home money on a *cash* basis :—

	£
Bonds on tap (+ Savings Certificates)	1,713,000,000
Other money borrowed including cash equivalent of 100,000,000*l.* bonds repaid....	252,000,000
	1,965,000,000

It must not be overlooked that during the second period, the recurring loans of Treasury bills and bank overdraft (the floating debt) had to be carried, the continued momentum of which is best realised by the daily turnover of 14,000,000*l.*

In spite of this daily turnover of Treasury bills and bank overdraft, the practical result of balancing the whole of the home expenditure by the cash received from loans and taxation direct from the people, is seen in the check to the curves representing the hitherto continuous rise in wholesale and retail prices. This transfers the purchasing power of the country from the people to the Government.

In the third period of one year ending March, 1920, the failure of the Funding Loan to reduce the floating debt is obvious. As a matter of fact it only raised sufficient cash (exclusive of the bank subscriptions) to balance the excess expenditure over revenue. The repeated new issues of Treasury bills required the manufacture of money (Ways and Means Advances) whenever the proceeds of the bills on tap failed to meet the cash equivalent for maturing debt. Adjustments of interest had been allowed to stimulate the flow of money into National War Bonds. The withdrawal of the bonds

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and the consequent removal of these adjustments of interest early in 1919 have added to the inflation in no small measure. This policy has resulted in driving up prices in every trade (as seen in the upward movement of the curves in the chart).

It will be seen from the table, page 50, that the cash equivalent of 618,000,000*l.* for cancelled debt and maturing obligations has been raised by the proceeds of bills on tap instead of bonds on tap; otherwise the bonds on tap would have been increased and the bills on tap would have been reduced by the same amount, 618,000,000*l.* A bond on tap has proved that the necessary flow of money from genuine savings and surplus current income can be obtained if the rate of interest is adjusted and the publicity appeal is made effective. The amazing effectiveness of such a policy is best illustrated by chart B, page 51, giving the cash receipts of National War Bonds (+ Savings Certificates), from October, 1917, to September, 1918. It will be observed from the chart that over 100,000,000*l.* in the first thirteen weeks were tempted into the continuous loan of bills on tap instead of the continuous loan of bonds on tap in consequence of the advantageous interest yield on the Treasury bills over National War Bonds. It will also be observed that, when the maximum bank deposit rate was reduced in June, 1918, the average weekly minimum receipts were raised. From this it may be assumed that if the reduction in the maximum interest allowed had been made throughout the whole period at least another 100,000,000*l.* of money would have been diverted into the bonds on tap. The increase in bank deposits during the period was over 200,000,000*l.* The bonds on tap were suddenly withdrawn just at the time when everybody was satisfied that the total would reach the second thousand million pounds or an additional 300,000,000*l.* Thus we find an opportunity was lost of a reduction in bills on tap and an increase of bonds on tap of 500,000,000*l.* The attempt to regain this lost opportunity by 5–15 year Treasury bonds of 5 per cent. (at present 7 per cent.) evidently requires something more than the subtleties of trained economic theorists to convince practical people to subscribe for the bonds. The time chosen was just as inopportune as the time chosen for the Funding Loan in 1919. This year the taxpayers and others were appalled at and suspicious of the *Budget* decision to raise an increased scale of taxation to repay 534,000,000*l.* of debt, this and next year: a proposal no sane business man would have advocated. Any wholesale reduction of debt from the proceeds of increased taxation must be made with the utmost caution in view of the credit facilities required for reconstruction.

The table, page 50, deals with the position for the six years

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ending March, 1920, since when Government borrowing is ear-marked to meet maturing debt. The results of the first six months of the current financial year work out as follows :—

	Six months ending September.	Estimate for current year.
	Million £.	Million £.
Revenue	619	1,410
Expenditure	541	1,176
Surplus	78	234
Reduction of Debt : Floating Debt	31	70
Million £		
Receipts .. 2,592		
Payments .. 2,623		
Average daily turnover, 18,000,000*l.*		
Foreign debt reduced	16	
Depreciation Fund	13	53
Sinking Fund	—	32
Cash equivalent for debt accepted for death duties, &c.	33	4
		75
	93	
Less—Bonds on tap (+ Savings Certificates) (since May 1st)	15	—
	78	234

The annual redemption, out of revenue, of the outstanding debt of bonds and bills—3,385,000,000*l.* as at March, 1920—demands a definite declared financial policy in order to restore the confidence of the people in Government continuous borrowing to replace maturing debt. According to the letter of the Chancellor of the Exchequer of February 11, in connection with the International Financial Conference in Brussels, the Government have laid down as a cardinal rule of their own policy the establishment of an adequate sinking fund for the reduction of debt out of revenue.

At present the only statutory sinking fund for repayment of debt is the one for the Funding Loan. This amounts to ½ per cent. on the nominal total of 768,000,000*l.*, or 3,840,000*l.* per annum in addition to interest.

With regard to the bond and bill debt a statutory sinking fund of ½ per cent. in addition to the interest on the nominal amount requires 16,925,000*l.* per annum. To keep alive a short-dated debt on the bond and bill system means the continuous borrowing by the Government to raise each year the cash equivalent required for the bonds and bills maturing and not converted. Experience proves that 60 per cent. of maturing bonds held by genuine investors will be converted into new bonds, provided the terms of the new

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bonds are attractive. This leaves a comparatively small amount of new money—say, 150,000,000*l.*—to be found each year. The chief attraction of a bond is the return of one's money intact with or without a premium, at the maturing date.

The interim report of the Committee on Currency and Foreign Exchanges after the War (published in August, 1918), recommends "that at the earliest possible moment an adequate sinking fund should be provided out of revenue, so that there may be a *regular annual reduction* of liabilities *more especially these which constitute the floating debt.*"

Mr. Chamberlain has repeatedly asserted that the Budget of 1920 was framed to provide a sinking fund for the current year of 234,000,000*l.* or 3 per cent. on the total debt. And the existing scale of taxation is estimated to produce a surplus in the next financial year of about 300,000,000*l.*, of which one-half should be free for the floating debt. I do not consider that the long-dated War Loans require a sinking fund. The repayment of the Funding Loan (768,000,000*l.*) is assured by the statutory sinking fund, leaving 2,118,000,000*l.*, as follows :—

	Million £.
3½ per cent. War Loan, 1925–28	63
4½ ,, ,, 1925–45	13
5 ,, ,, 1929–47	1,978
4 ,, ,, 1929–42	64
	2,118

He also said, "With the advent of a 'normal year' when temporary receipts and charges both terminated, and on the assumption that the Excess Profits Duty has been brought to an end, there should be available for the Sinking Fund a balance of not less than 180,000,000*l.*" Only 70,000,000*l.* will be available for the reduction of the floating debt this year in consequence of the following obligations which the Chancellor proposes to pay out of the revenue for the year.

	£	£
Sinking fund for Funding Loan	3,840,000	
Depreciation fund for the 4 per cent. and 5 per cent. War Loan	31,920,000	35,760,000
Cash equivalent for—		
Debt accepted for death duties	15,000,000	
Debt accepted for Excess Profits Duties	60,000,000	
Reduction of external debt	53,240,000	128,240,000
		164,000,000

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Is it not too great a strain on the current income of the people to increase taxation to repay 128,240,000*l.* of maturing debt, when this could easily be replaced by a bond on tap ? A statutory sinking fund of 16,925,000*l.* is the sound financial alternative to excessive taxation for the reduction of debt on a heroic scale.

The problem of continuous borrowing from the people direct was triumphantly solved when joint stock deposit banking was freed from restrictions. Sir Robert Peel in 1844 laid the foundation of an effective gold reserve through the circulation of gold coin. Mr. Gladstone—ten years later—laid the foundation for an effective currency through the creation of the cheque book habit. Mr. Goschen —in 1890—laid the foundation for the increased cash on hand and money at call through the joint stock deposit banking.

Since 1880 the joint stock deposit banks have published balance-sheets and it is therefore possible to give an accurate account of their forty years' stewardship. The results are seen in the chart C and tables, pages 52, 42 and 43.

This chart and tables show that when the deposit system of joint stock banking in England was taken to the doors of the people by the branches of the banks the margin between the continuous borrowing (deposits, ·-·-·-·-·- curve) and the lending (discounts and advances, +++++++ curve) widened. This enabled the banks to increase the cash on hand and money at call (———— curve). There has been a marked difference in the capital and reserve funds (..... curve), owing to amalgamation of banks. The upward movement in the investments (o-o-o-o-o curve) is due to the direct subscriptions of the banks to the War Loans. Bearing these facts in mind, the examination of the aggregate figures of the banks of the United Kingdom (exclusive of the Bank of England), 1913–1919, will explain the manufacture of bank deposits by the Government to finance the War.

Aggregate figures of the banks of the United Kingdom (exclusive of the Bank of England) :—

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	1913.	*Per cent.*	1914.	1915.	1916.
	Million £.		Million £.	Million £.	Million £.
Deposits	1,032	*83*	1,135	1,243	1,444
Acceptances	67	*5*	53	66	75
Notes	33	*3*	44	44	52
Capital and reserve funds	114	*9*	112	112	110
	1,246	*100*	1,344	1,465	1,681
Advances, discounts, investments	873	*70*	926	1,052	1,132
Cover for acceptances premises	80	*6*	88	83	95
Cash, &c.	293	*24*	330	330	454
	1,246	*100*	1,344	1,465	1,681
Margin: Deposits over advances, discounts, investments	159	—	209	191	312

	1917.	1918.	1919.	*Per cent.*	Increase 1919 over 1913.
	Million £.	Million £.	Million £.		Million £.
Deposits	1,705	1,988	2,356	*87*	1,324
Acceptances	71	63	159	*6*	92
Notes	62	72	65	*2*	32
Capital and reserve funds	114	125	148	*5*	34
	1,952	2,248	2,728	*100*	1,482
Advances, discounts, investments....	1,336	1,544	1,969	*73*	1,096
Cover for acceptances premises	89	93	172	*6*	92
Cash, &c.	527	611	587	*21*	294
	1,952	2,248	2,728	*100*	1,482
Margin: Deposits over advances, discounts, investments	369	444	387	—	228

The increase of 228,000,000*l.* in the margin—1919 over 1913—between the borrowing (deposits) and the lending (advances, discounts and investments), may be taken as the result of the increased genuine savings and surplus current income of the people, tapped by the branches of the banks during the War. It is impossible to ascertain precisely the proportion of the increase of 1,096,000,000*l.* in the deposits (1,324,000,000*l.* less 228,000,000*l.*) and the same amount in advances, discounts and investments due to the direct and indirect use of bank credit to carry Government securities. We may assume

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it is not less than 700,000,000*l.*, leaving 396,000,000*l.* due to an expansion of discounts and advances to traders and others.

In order to realise fully the significance of the increase of 294,000,000*l.* in the cash on hand and money at call in 1919 over 1913, one must first examine the figures of the Bank of England and the currency note account.

The chart D and tables (pages 53 and 45) give the annual average of the weekly statement of the Bank of England, and on page 39, the currency note account. This chart and tables reflect in the Bank of England figures the same characteristic facts as the percentage chart and tables of the joint stock banks of England, namely, the widening margin between deposits (..... curve) and securities (·-·-·-·-·- curve) with the resultant increase in the cash reserve (++++++++ curve). The increase of the cash on hand and money at call of the joint stock banks of England, and the increase in the cash reserve in the annual average of the weekly statement of the Bank of England, show the same downward movement when the greatest strain on bank credit is felt by the lack of a sound Government borrowing policy to replace the floating debt. On the other hand it is satisfactory to find the margin between the Bank of England notes issued (———— curve) and the gold held (o-o-o-o-o curve) has been consistently maintained. The upheaval shown in the Bank of England chart and the tables of the deposits and securities (.....) (·-·-·-·-·-) is better left to the explanation from the following official sources.

The "Currency Report" already referred to gave the classic example of the manufacture of money. It supposed the Government to require in a given week 10,000,000*l.* over and above the receipts from taxation and loans from the public. The Government would apply for an advance from the Bank of England, which by a book entry places the amount required to the credit of Public deposits, and the same amount is added to the assets. The distribution of Government disbursement transfers Public deposits into deposits with the other banks, and the same amount is added to the assets of the other banks. This increases by 10,000,000*l.* the purchasing power in the hands of the people in the form of deposits in the joint stock banks. This process is repeated again and again, until each 10,000,000*l.* originally advanced by the Bank of England creates new deposits representing new purchasing power to several times that amount. It is these processes which enabled the banks to finance directly and indirectly Government securities for 700,000,000*l.* Before the War these processes, if continued, compelled the Bank of England to raise the Bank rate; but the unlimited issue of

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currency notes has now removed this check upon the continued creation of credit in the form of Bank deposits with its concomitant increase of currency notes.

The second report from the Select Committee on National Expenditure (issued in 1917) states: "It it had been possible "to finance the war from day to day by means entirely of the "proceeds of taxation and of loans of money drawn from the savings "of the people, there can be no doubt that the general increase "of prices would have been considerably less than it has been; "the result would have been to transfer purchasing power from "the hands of individuals to the hands of the Government." Both the "Currency" and this report were published before the result of the issue of National War Bonds was realised.

At a Court of Directors at the Bank of England on Thursday, September 18, 1919, the Court requested the Governor to draw the Chancellor's attention both to the amount and to the duration of the Ways and Means advances, which for the past two years had in effect to a large extent partaken of the nature of a continuous loan, and to express the earnest hope that such loans might be obtained from the public, and the Bank's advances once more confined to the Treasury's temporary requirements.

In the usual quarterly letter from the Chancellor to the Bank of England on December 19, 1919, the proposal that the advances should be made either on the Credit of Ways and Means or on the security of Treasury bills was agreed to.

The Chancellor of the Exchequer, in his Budget statement on April 19, pointed out that the recourse to Bank of England Ways and Means advances to meet the withdrawals of money from Treasury bills involved the creation of new purchasing power based solely on Government credit uncovered and unprotected by an increased production of wealth. In referring to the increase of the discount rate on Treasury bills, he said, "Money like all other things, is subject "to the ordinary law of supply and demand. The competition of "trade was too much for me at the rate then offered. Money went "to trade rather than to Treasury bills." When the Government borrowed money by a direct appeal to the people (National War Bonds) the saving in the interest charge for one year was 20,000,000*l.* To-day the floating debt which represents only 10 per cent. of the money raised in the six years is costing us in increased interest for one year 30,000,000*l.*

The weekly statement of the Bank of England does not convey the kaleidoscopic fluctuations in the figures which one would expect to see from the weekly Exchequer return. The chart and figures

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show that the floating debt has expanded the deposits and securities of the Bank of England because it is held in a few hands. The way out of a continuous loan of 1,000,000,000*l.* in Treasury bills of 5,000*l.* and multiples, repayable in three months, and 200,000,000*l.* bank overdraft, is the replacement of half of this 1,200,000,000*l.* in the hands of a narrow circle of holders by the widest possible circle. This means a continuous loan of bonds of 5*l.* and multiples, repayable five or ten years hence, held by the million. The practical result would be a transfer of credit with no new creation of credit, and with no diminution of the cash reserve of the Bank of England.

The supreme service rendered to the country by joint stock deposit banking in England is perhaps best illustrated by the margin between the borrowing (deposits) and the lending (advances, discounts and investments) per head of the population.

	Joint Stock Banks of England (exclusive of the Bank of England) per head of the population.					Banks of the United Kingdom (exclusive of the Bank of England) per head of the population.			
	1881.	1891.	1901.	1911.	1913.	1889.	1899.	1909.	1913.
	£	£	£	£	£	£	£	£	£
Deposits	9	13	17	20	22	11	19	20	23
Advances, discounts, investments	9	12	15	17	18	11	17	17	19
Margin	—	1	2	3	4	—	2	3	4
Capital and reserve funds	2	2	2	2	2	2	3	2	2
	2	3	4	5	6	2	5	5	6
Cash on hand and money at call	2	3	4	5	6	2	5	5	6

The increase of the cash on hand and money at call reached 6*l.* per head of the population in 1913 as compared with 2*l.* per head in 1889. This addition of 4*l.* per head was made up approximately by an increase of 1*l.* per head of the population in each of the following items: Gold, Bank of England balance and notes, money in transit, and money at call. The actual figures are:—

	£
Cash on hand and money at call, 1889	95,000,000
Cash on hand and money at call, 1913	293,000,000
	£198,000,000

It is satisfactory to find that the increase of 4*l.* per head of the population represents an increased percentage of cash on hand

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and money at call to liabilities. This was due to a reduction in the percentage of investments to liabilities and not to a reduction in the percentage of advances and discounts which are used by the bankers to lubricate the wheels of commerce. Thus, when the War broke out the joint stock deposit banks gave the people of this country a superlative credit machine of unexampled and unequalled solidity.

We can now analyse the composition of the increase of the cash on hand and money at call in 1919 over 1913. From the average yearly figures of five years of the banks which separate the cash on hand from the money at call, it can safely be estimated that the money at call before the War amounted to 9 per cent. of the total liabilities, and last year to 7 per cent. with the following approximate result :—

	1913.	Per cent.	1919.	Per cent.
	£		£	
Cash on hand	183,000,000	15	390,000,000	14
Money at call	110,000,000	9	197,000,000	7
	293,000,000	24	587,000,000	21

The cash on hand has increased 207,000,000*l.*; one-half of this increase is estimated to consist of legal tender money and one-half of the Bank of England balance and money in transit.

The legal tender money has increased :—

	£
Currency notes, December, 1919	356,000,000
Less Currency notes in place of gold coin in circulation in 1913	70,000,000
	286,000,000

Bank of England note circulation :—

	£	
1913	29,000,000	
1919	92,000,000	
		63,000,000
		349,000,000

If we deduct 100,000,000*l.*—the estimated increase in the amount held by the banks—there remains 249,000,000*l.*

The other deposits of the Bank of England have increased 120,000,000*l.* :—

1913 .... £61,000,000 1919 .... £181,000,000

The money in transit, judging by the daily average turnover of the London and Provincial Bank clearing-houses, has increased 43,000,000*l.* :—

1913 .... £58,000,000 1919 .... £101,000,000

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If we deduct the increase of 100,000,000*l.* held by the banks from the total increase of 163,000,000*l.* in other deposits and money in transit, there remains 63,000,000*l.*, or a total of 312,000,000*l.* (249,000,000*l.* plus 63,000,000*l.*) more in 1919 than in 1913, outside the home banking system. The question arises: can half of the increase of 700,000,000*l.* bank deposits, plus this 312,000,000*l.* be tapped by an effective issue of bonds? There is no mystery about a sound financial borrowing policy from the people direct. The war sent up prices in consequence of an artificial manufacture of money which stimulated wasteful consumption and reduced wise production. To these must be added the drastic War restrictions to prevent free interchange of commodities, and the heavy toll paid for non-productive services, doles and subsidies. Financial heresy cannot feed, clothe and house a nation, although it may temporarily finance a war. There can be no doubt that the money can be borrowed if the policy adopted is sound. We have seen 618,000,000*l.* of longer-dated Government securities repaid by the cash equivalent of shorter-dated Government securities. We have seen 500,000,000*l.* of money diverted from National War Bonds. And to-day we are face to face with the problem of finding 534,000,000*l.* of money for the increased scale of taxation in order to repay 534,000,000*l.* of maturing debt in two years and 180,000,000*l.* in a normal year.

I make five suggestions:—

(1) The removal of the restriction of the twopenny stamp duty on cheques in order to encourage the use of cheques. This will automatically reduce the use of currency notes. And the result will be a repetition of what Mr. Gladstone did for the country when a note currency was replaced by a cheque currency. Every 10,000,000*l.* collected out of the pockets of the people for the purchase of a Government security reduces the liabilities and the assets of the currency note account. The gold and the note reserves are undiminished in amount, but the percentage is increased.

(2) The removal of the restriction which deters traders and others from investing bank deposits in Treasury bonds. At present such an investment is not considered, in calculating the Excess Profit Duties, as capital employed in business. The concession required is the difference between the interest earned on an investment in Treasury bonds, and the interest allowed on the capital employed in the business. In the event of the withdrawal of the E.P.D., I suggest the offer of a bond of the National War Bond type. Every 10,000,000*l.* invested out of bank deposits in Government securities held by the banks would reduce the liabilities and assets of the banks by the same amount. The legal tender money of the banks would remain undiminished, but the percentage to the reduced

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liabilities would be increased. This would enable the banks to do automatically one of two things, or, proportionately, both :—

(*a*) To reduce the legal tender money.

(*b*) To expand bank credit for the increase of wise production.

In the improbable event of the demand exceeding the supply of self-liquidating Government short-dated securities held by the banks, the supply can be obtained from a transfer of War Loans held by the banks into bonds. The precedent for this exchange was created in 1915, when 4½ War Loan was exchanged for self-liquidating Exchequer bonds on an equitable basis as far as the Government and the banks were concerned.

It is evident that a too rapid deflation of the purchasing power represented by bank deposits can be effectually checked by a simultaneous expansion of bank credit due to the increased percentage of cash on hand to reduced liabilities of deposits. When banks expand credit for productive enterprise the addition to spending power is counterbalanced by the addition to purchasable goods. On the other hand when the Government expands credit by seizing the easy method of a continuous bank loan the addition to spending power can only be counterbalanced by increased taxation or the issue of bonds which will tap the surplus cash of the people.

(3) The offer of a bond on the Victory bond type to stimulate the habit of thrift amongst the people who spend freely and invest freely in speculative ventures.

(4) The removal of the restriction to taxpayers who are not tempted to invest in bonds because they are not accepted for payment of taxes. Taxpayers are therefore compelled either to accumulate bank balances or to borrow temporarily to pay taxes. This is a mild form of inflation which bonds on tap can cure without hurting anyone.

(5) The establishment of a *statutory* sinking fund of ½ per cent. in addition to the interest on the bond and bill debt.

There can be no manner of doubt that the bond habit in a few years will provide an A1 security, viz., bonds falling due within twelve months, not held for conversion. There will be a free market for bonds falling due within two or three years, not firmly held by investors. And the flow of money into bonds will not be checked by market price fluctuations, because the majority of people are not concerned with the vagaries of the stock exchanges.

The experience of Greater Manchester[1]—one-fourth of the population—during the last thirty years proves that the flow of money into short-dated loans does not check but stimulates the flow of money

[1] "Greater Manchester" embraces a radius of 25 miles from the centre of the city and thus includes Liverpool.

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into bank deposits and into investments managed by our stock-brokers.

The ultimate result of an effective continuous issue of bonds was aptly phrased by Lord Inchcape in his Chairman's address to his bank shareholders in 1919: "The remarkable success of "Mr. Bonar Law's policy in adopting the plan of bonds 'on tap' "is a marvellous achievement. And there is probably no greater "safeguard for the country than the fact that from the highest to "the lowest everyone with a pound to spare has lent it to the Govern-"ment. . . . We have become for the first time in our history "a nation of rentiers."

APPENDIX I.

Currency Note Account (approximate).

	Liabilities.	Assets (redemption account).	
	Notes and certificates outstanding.	Gold reserve.	Government securities and Bank of England balance.
December:—	Million £.	Million £.	Million £.
1914	39	18	20
1915	103	28	70
1916	150	28	120
1917	213	28	190
1918	323	28	310
1919	356	28	340

The system of an unlimited issue of currency notes was abolished at the commencement of this year, and the legal maximum fiduciary issue was fixed at 320,600,000*l.* Bank of England notes are now held in addition to the gold reserve. The issue of currency notes is equivalent to a Government loan free from interest. It is therefore all the more surprising to find the revenue receipts credited with the excess interest on the currency note investment reserve account beyond the proportion of 5 per cent. on the securities as follows:—

	£
1918	1,975,000
1919	4,239,500
1920	12,700,000
	18,914,500

Might not the Government have purchased gold with this profit, and added it to the gold reserve? With the exception of the offer of Savings Certificates the Government has made no serious attempt

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to magnetise currency notes out of the pockets of the people into a suitable Government security.

The new public who are now using an excessive amount of currency notes would be only too willing to purchase a Government security with the surplus notes carried by them, if a satisfactory Government security were available which would appeal to their self-interest. Joint stock deposit banking has proved this is so.

The gold reserve has now been centralised with highly satisfactory results as follows :—

	1914, August.	1920, September.
	Million £.	Million £.
Bank of England	30	122
Treasury	—	28
Other banks	40	—
Gold circulation	70	—
	140	150

To the 150,000,000*l.* must be added £*x*. of gold held by the other banks, and other invisible gold reserves.

APPENDIX II.

The London Bankers' Clearing-House.

The most striking feature is the continuous increase in the yearly turnover. It shows that the growth of joint stock deposit banks had asserted itself in no unmistakable manner. The daily average has increased as follows :—

	£		£
1889	25,000,000	1899	35,000,000
1909	45,000,000	1919	95,000,000

The above totals do not include the inter-clearing arrangements of the banks or the numerous local clearings.

The figures of the Metropolitan, country, and provincial clearings naturally give a better indication of the volume of the trade of the country than the town clearings, in which financial transactions play so important a part. In pre-War days the constant credit turnover to meet the money market daily demands formed an important proportion of the town clearings. The diminution of the totals at the outbreak of war is seen in the yearly totals. The same diminution in the yearly totals may be seen in the periods of commercial and financial depression. For instance, in 1883–84, the reduced totals were due to the monetary trouble in the United States ; in 1890–94, to the Baring crisis and its concomitant check to our operations ; in 1906, to the effects of the South African War ;

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in 1907, to the American crisis. Since 1914 the daily cash turnover of the Stock Exchanges have considerably increased the daily average clearing in place of the fortnightly clearings.

The effect of the War finance is first noticeable in the year 1917. The large increase of 3,844,000,000*l.* in this year is in consequence of the daily flow of money due to the Government borrowing by (*a*) the War Loan which was in the nature of a continuous loan in consequence of the large amount borrowed by subscribers from the banks; (*b*) by the National War Bonds (plus Savings Certificates); (*c*) by the continuous Tresaury bill loan.

Mr. Bonar Law in his Budget for 1918 brought forward a proposal for increasing the stamp duty on cheques from 1*d.* to 2*d.*, a proposal which, in 1902, met with strong opposition, and was consequently withdrawn. Mr. Bonar Law, owing to the exigencies of the War, carried his proposal, but not without considerable opposition. It is to be hoped that the tax will be entirely withdrawn in order that the country may economise the legal tender money by the extension of the banking system with the economy of a cheque currency. The revenue receipts from the twopenny stamp duty on cheques is only 3,000,000*l.*, or one-fifth of 1 per cent. of the revenue.

The maintenance of a continuous yearly increase to the extent of 2,076,316,000*l.* in 1918 as compared with 1917 is due to the daily purchases of National War Bonds (plus Savings Certificates) together with the continuous Treasury bill loan.

This method of continuous borrowing from the people direct had the effect of distributing the money much more evenly throughout the year, and prevented any dislocation of the money market. In 1919 the "artificial manufacture of credit" by the continuous Treasury bill loan and the Government's Bank of England continuous overdraft became a leading feature. The daily transactions form a strikingly important item in the figures. The increase of 1919 over 1918 is no less than 7,218,000,000. This forms a significant commentary on the want of a Treasury borrowing policy in dealing with maturing debt. This is all the more significant when we find that the six months' figures for June, 1920, are at the rate of a daily average of 130,000,000*l.* against 53,000,000*l.* for 1913. According to the calculations of the Government, goods and services to-day cost more than twice as much as before the War, thus making for comparative purposes the pre-War turnover of the Bankers' Clearing Houses equal to a daily average of 112,000,000*l.* Thus the present daily average increase of 18,000,000*l.* is represented by the continuous Treasury bill loan plus the continuous Bank of England Government overdraft. The weekly Treasury return for these two items shows a daily average credit turnover of 18,000,000*l.*

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Comparative statements. Joint Stock Banks of England (excluding Bank of England).

Compiled from figures published in the *Economist*.

Year.	Number of banks.	Number of branches.	Capital.	Per cent. of liabilities.	Reserves (and undivided profits).	Per cent. of liabilities.	Deposits.	Per cent. of liabilities.	Acceptances.	Per cent. of liabilities.	Total liabilities.	Cash and money at call.	Per cent. of liabilities.	Investments.	Per cent. of liabilities.	Discounts and advances.	Per cent. of liabilities.
			Mil. £.		Million £		Million £.		Mil. £.		Mil. £.	Million £.		Mil. £.		Million £.	
1880....	89	1325	31	*10*	17	*6*	227	*77*	18	*6*	296	53	*18*	38	*13*	183	*62*
1881....	93	1370	33	*11*	18	*6*	242	*77*	17	*5*	313	58	*19*	41	*13*	196	*63*
1882....	100	1488	35	*11*	20	*6*	257	*77*	18	*5*	331	59	*18*	43	*13*	212	*64*
1883....	104	1554	37	*10*	21	*6*	269	*77*	19	*5*	350	61	*18*	47	*13*	218	*62*
1884....	107	1542	38	*10*	22	*6*	284	*78*	15	*4*	364	61	*17*	57	*16*	226	*62*
1885....	110	1498	40	*11*	23	*6*	294	*79*	14	*4*	374	66	*18*	63	*17*	225	*60*
1886....	109	1546	38	*10*	23	*6*	299	*79*	13	*3*	377	68	*18*	74	*20*	226	*60*
1887....	109	1655	39	*10*	23	*6*	308	*80*	14	*4*	387	68	*18*	67	*16*	232	*60*
1888....	111	1710	39	*9*	24	*6*	334	*80*	15	*4*	416	76	*19*	71	*17*	248	*60*
1889....	103	1918	39	*9*	25	*6*	353	*80*	19	*4*	439	80	*18*	75	*17*	262	*60*
1890....	105	2214	44	*9*	27	*6*	369	*80*	23	*5*	464	84	*18*	82	*17*	269	*58*
1891....	106	2255	43	*9*	27	*6*	392	*81*	16	*3*	486	91	*19*	90	*19*	282	*59*
1892....	102	2337	44	*9*	28	*6*	397	*80*	20	*4*	496	93	*19*	96	*19*	282	*57*
1893....	99	2526	44	*9*	29	*6*	394	*80*	19	*4*	491	88	*18*	95	*19*	284	*58*
1894....	99	2624	44	*9*	28	*5*	419	*81*	20	*4*	516	106	*21*	98	*19*	287	*55*
1895....	99	2695	44	*8*	28	*5*	456	*82*	24	*4*	559	111	*20*	108	*19*	312	*52*
1896....	94	3051	45	*8*	30	*5*	495	*83*	22	*4*	600	116	*19*	118	*19*	339	*57*
1897....	90	3454	45	*7*	31	*5*	527	*83*	22	*4*	632	126	*20*	124	*20*	454	*56*
1898....	87	3577	46	*7*	33	*5*	549	*84*	21	*3*	654	137	*21*	125	*19*	363	*55*
1899....	83	3826	46	*7*	34	*5*	566	*84*	22	*3*	674	136	*20*	127	*19*	382	*57*

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Comparative statements. Joint Stock Banks of England (excluding Bank of England)—Contd.

Compiled from figures published in the *Economist*.

Year.	Number of banks.	Number of branches.	Capital.	Per cent. of liabilities.	Reserves (and undivided profits).	Per cent. of liabilities.	Deposits.	Per cent. of liabilities.	Acceptances.	Per cent. of liabilities.	Total liabilities.	Cash and money at call.	Per cent. of liabilities.	Investments.	Per cent. of liabilities.	Discounts and advances.	Per cent. of liabilities.
			Mil. £.		Million £.		Million £.		Mil. £.		Mil. £.	Million £.		Mil. £.		Million £.	
1900....	77	3757	46	7	36	5	587	84	22	3	699	144	21	128	18	395	57
1901....	74	3935	47	7	37	5	589	84	24	4	698	154	22	130	18	381	55
1902....	68	4146	48	7	38	5	600	83	25	4	718	165	23	131	17	388	54
1903....	65	4334	49	7	37	5	588	83	27	4	708	149	21	126	18	396	56
1904....	61	4445	48	7	38	5	603	83	29	4	723	166	23	129	18	391	54
1905....	59	4558	48	6	38	5	628	83	39	5	758	180	24	132	17	402	53
1906....	55	4722	48	6	38	5	648	83	42	5	782	179	23	131	17	426	54
1907....	52	4822	48	6	37	5	649	83	44	6	783	174	22	126	16	432	55
1908....	50	4903	49	6	38	5	675	84	42	5	807	226	24	137	17	428	53
1909....	46	5022	48	6	38	5	685	84	41	5	816	200	24	137	17	433	53
1910....	45	5202	48	6	37	4	721	84	52	6	862	200	23	138	16	468	54
1911....	44	5410	47	6	37	4	749	85	49	6	885	211	24	134	15	486	55
1912....	44	5577	48	5	37	4	774	84	61	7	926	216	23	128	14	515	56
1913....	43	5797	49	5	39	4	809	84	62	6	963	236	24	121	13	539	56
1914....	38	5869	48	5	39	4	896	87	48	5	1,034	276	28	146	14	553	54
1915....	37	6027	49	5	37	3	993	86	63	6	1,147	262	23	311	27	504	44
1916....	35	5993	48	4	37	3	1,155	88	69	5	1,316	369	28	323	25	542	41
1917....	34	6004	49	3	41	3	1,365	89	66	4	1,529	428	28	340	22	686	45
1918....	26	6285	50	3	48	3	1,583	91	59	3	1,743	481	28	347	20	834	48
1919....	21	6918	56	3	55	3	1,874	88	151	7	2,138	453	21	399	19	1,130	53

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Aggregate figures of the Banks of the United Kingdom (exclusive of the Bank of England).

Compiled from figures published in the *Economist*.

	1889. Estimated.		1899.		1909.		1919.	
	Million £.	Per cent.	Million £.	Per cent.	Million £.	Per cent.	Million £.	Per cent.
Liabilities—								
Deposits	425	*80*	760	*83*	880	*83*	2,356	*87*
Acceptances	25	*5*	26	*3*	46	*4*	159	*6*
Notes, drafts, etc.			22	*2*	21	*2*	65	*2*
Capital, reserves and undivided profits	75	*15*	116	*12*	119	*11*	148	*5*
	525	*100*	924	*100*	1,066	*100*	2,728	*100*
Assets—								
Discounts and advances	315	*60*	512	*56*	559	*53*	1,367	*51*
Investments	90	*17*	190	*20*	205	*19*	602	*22*
Cover for acceptances, premises, etc.	25	*5*	41	*4*	56	*5*	172	*6*
Cash in hand and money at call	95	*18*	181	*20*	246	*23*	587	*21*
	525	*100*	924	*100*	1,066	*100*	2,728	*100*

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Bank of England. Annual average of the weekly return of the Bank of England for the ten years 1880–89.

Compiled from figures published by the *Bankers' Almanac.*

Year.	Issue department.			Banking department.			Proportion of reserve to liabilities.
	Notes issued.	Securities.	Gold.	Deposits, public and private.	Securities, Government and other.	Reserve.	
1880....	41	15	26	33	34	16	*48*
1881....	39	15	24	31	35	13	*43*
1882....	37	15	22	29	35	11	*39*
1883....	37	15	22	30	35	12	*42*
1884....	38	15	23	31	34	13	*42*
1885....	39	15	24	33	35	15	*45*
1886....	35	15	20	29	34	12	*41*
1887....	36	16	20	29	33	13	*45*
1888....	35	16	19	31	37	12	*41*
1889....	36	16	20	33	37	13	*40*

Bank of England. Annual average of the weekly return of the Bank of England for the ten years 1890–99.

1890....	37	16	21	33	37	13	*41*
1891....	39	16	23	38	40	15	*41*
1892....	40	16	24	36	38	15	*43*
1893....	41	16	25	36	37	16	*47*
1894....	48	16	32	41	33	25	*63*
1895....	53	16	37	48	36	29	*62*
1896....	58	16	42	60	43	34	*58*
1897....	50	16	34	50	42	25	*50*
1898....	48	16	32	50	44	23	*46*
1899....	47	16	31	49	45	21	*43*

Bank of England. Annual average of the weekly return of the Bank of England for the ten years 1900–09.

1900....	49	17	32	50	46	21	*43*
1901....	51	17	35	50	43	24	*47*
1902....	51	18	33	52	45	24	*46*
1903....	50	18	32	50	44	23	*47*
1904....	50	18	32	50	43	24	*49*
1905....	52	18	34	56	48	25	*45*
1906....	51	18	33	53	47	23	*44*
1907....	52	18	34	53	46	24	*45*
1908....	54	18	36	53	44	26	*50*
1909....	54	18	36	54	45	26	*49*

Bank of England. Annual average of the weekly return of the Bank of England for the ten years 1910–19.

1910....	54	18	36	54	44	27	*49*
1911....	55	18	37	55	44	28	*51*
1912....	57	18	37	59	48	28	*48*
1913....	54	18	36	54	44	27	*49*
1914 ...	64	18	46	99	83	33	*34*
1915 ...	77	18	59	189	162	44	*23*
1916....	73	18	55	153	131	39	*26*
1917....	71	18	53	179	166	33	*19*
1918....	84	18	66	174	162	29	*17*
1919....	103	18	85	147	138	26	*18*

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Bank of England weekly return at the end of :—

	1889.		1899.		1909.		1913.		1919.		Increase 1919 over 1913.
	Million £.	Per cent.	Million £.	Per cent.	Million £.	Per cent.	Million £.	Per cent.	Million £.	Per cent.	Million £.
Issue department—											
Notes issued	33	*100*	44	*100*	50	*100*	52	*100*	109	*100*	57
Government debt	11	*33*	11	*25*	11	*22*	11	*21*	11	*10*	
Other securities....	5	*15*	6	*13*	7	*14*	7	*14*	7	*6*	
Gold	17	*52*	27	*62*	32	*64*	34	*65*	91	*84*	57
	33	*100*	44	*100*	50	*100*	52	*100*	109	*100*	57
Banking department—											
Capital	14	*31*	14	*21*	14	*18*	14	*16*	14	*6*	
Rest	3	*6*	3	*5*	3	*4*	3	*4*	3	*1*	
Public deposits	6	*12*	7	*10*	11	*14*	10	*11*	19	*9*	9
Other deposits	23	*51*	42	*64*	50	*64*	61	*69*	181	*84*	120
	46	*100*	66	*100*	78	*100*	88	*100*	217	*100*	129
Government securities....	15	*31*	13	*20*	14	*18*	13	*15*	93	*43*	80
Other securities....	22	*51*	36	*55*	42	*54*	52	*59*	107	*50*	55
Reserve	9	*18*	17	*25*	22	*28*	23	*26*	17	*7*	— 6
	46	*100*	66	*100*	78	*100*	88	*100*	217	*100*	129
Note circulation	24	—	27	—	28	—	29	—	92	—	63

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The liabilities of the Bank of England (other deposits and note circulation), not covered by gold, have increased as follows:—

	1889.	1899.	1909.	1913.	1919.	1920 September.
Notes issued	33	44	50	52	109	140
Less reserve	9	17	22	23	17	14
Note circulation	24	27	28	29	92	134
Add other deposits	23	42	50	61	181	111
	47	69	78	90	273	245
Less gold	17	27	32	34	91	121
Liabilities of other deposits and note circulation not covered by gold	30	42	46	56	182	124

In the Treasury receipts from revenue under "sundry contributions towards expenses of war," there appears the Bank of England contribution of war profits amounting to:—

	£
1919	1,872,907
1920	706,712
	2,579,619

Might not the Government have purchased gold with this profit and commenced to repay the Government debt to the bank?

London Bankers' Clearing House.

Year.	Totals for the years.	Year.	Totals for the years.	Year.	Totals for the years.
	£		£		£
1880	5,794,238,000	1890	7,801,048,000	1900	8,960,170,000
1881	6,357,059,000	1891	6,847,506,000	1901	9,561,169,000
1882	6,221,206,000	1892	6,481,562,000	1902	10,028,742,000
1883	5,922,404,000	1893	6,478,013,000	1903	10,119,825,000
1884	5,798,555,000	1894	6,337,222,000	1904	10,564,197,000
1885	5,511,071,000	1895	7,592,886,000	1905	12,287,935,000
1886	5,901,925,000	1896	7,574,853,000	1906	12,711,334,000
1887	6,077,097,000	1897	7,491,281,000	1907	12,730,393,000
1888	6,942,172,000	1898	8,097,291,000	1908	12,120,362,000
1889	7,618,766,000	1899	9,150,269,000	1909	13,525,446,000

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London Bankers' Clearing House—Contd.

Year.	Totals for the years.	Town clearing.	Proportion of town clearing to total.	Metropolitan clearing.	Proportion of Metropolitan clearing to total.	Country cheque clearing.	Proportion of country cheque clearing to total	Nine provincial clearing houses (not included).
	£	£	Per cent.	£	Per cent.	£	Per cent.	£
1910	14,658,863,000	12,697,679,000	86·6	770,872,000	5·2	1,190,312,000	8·1	744,000,000
1911	14,613,877,000	12,596,071,000	86·1	796,386,000	5·4	1,221,420,000	8·3	773,000,000
1912	15,961,773,000	13,813,447,000	86·5	841,264,000	5·2	1,307,062,000	8·1	824,000,000
1913	16,436,404,000	14,191,275,000	86·3	855,648,000	5·2	1,389,481,000	8·4	869,000,000
1914	14,665,048,009	12,434,322,000	84·7	860,262,000	5·8	1,370,464,000	9·3	800,000,000
1915	13,407,725,000	10,911,090,000	81·3	929,064,000	6·9	1,567,571,000	11·6	951,000,000
1916	15,275,046,000	12,328,568,000	80·7	1,074,027,000	7·0	1,872,451,000	12·2	1,157,000,000
1917	19,121,196,000	15,699,528,000	82·1	1,177,478,000	6·1	2,244,190,000	11·7	1,386,000,000
1918	21,197,512,000	17,031,628,000	80·3	1,429,611,000	6·7	2,736,273,000	12·9	1,707,000,000
1919	28,415,382,000	23,214,685,000	81·6	1,813,929,000	6·3	3,386,768,090	11·9	2,159,000,000

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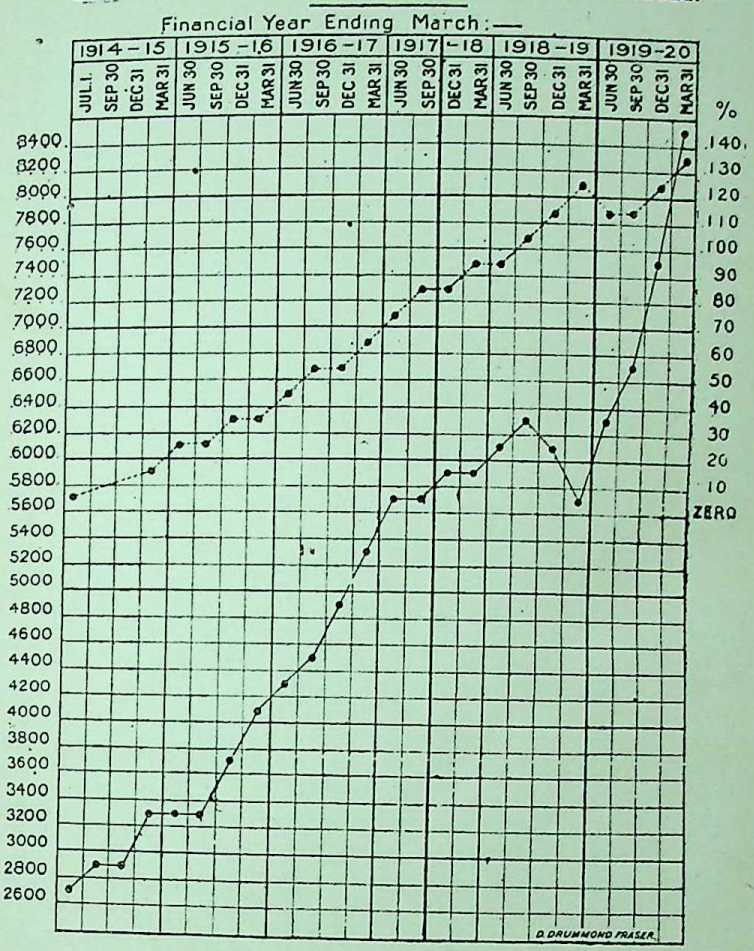
CHART A.

ECONOMIST INDEX NUMBER OF WHOLESALE PRICES.



The full line shows the variations in the *Economist* Index-number.

The dotted line represents percentage increase in the cost of living (all items) since July 1, 1914.

From *Labour Gazette*, published by the Ministry of Labour.

[For particulars of Government borrowing and debt outstanding, see page 50.]

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Table to accompany Chart A.

Government expenditure and receipts.	First period 3½ years ending September, 1917.		Second period 1½ years ending March, 1919.		5 years.	Third period 1 year ending March, 1920.	Expenditure and receipts 6 years.		Outstanding debt at March, 1920.	Cash equivalent of cancelled or repaid Debt less conversion.	
	Million £	Per cent.	Million £	Per cent.	Per cent.	Million £	Million £	Per cent.	Million £	Million £	
Expenditure	5,645	..	3,947	..	..	1,666	11,258				
Money borrowed :—											
Bonds on tap (+ Savings Cert.) ..	720	13	† 1,713	4	25	†—5	2,428	22	2,073	355	
Do. repaid	..	..	..	..	..	..	..	..	..	200	
Floating debt { Bills on tap	936	30	23		15	−100	1,312	12	1,312	..	
Floating debt { Bank advances	224		229								
War loans	*1,694	30	..	..	18	474	2,168	19	2,886	..	+718
Do. cancelled	..	..	..	..	..	..	..	..	..	150	
Home debt	3,574	63	1,965	50	58	369	5,908	53	..	..	
Foreign debt	‡704	12	694	17	14	13	1,411	12	1,231	180	
Less :—Depreciation fund	18	..	18	−1	−1	27	90	−1	..	134	
Adjustments	7	..	8			29	44				
	4,253	75	2,606	66	71	326	7,185	64	..	..	
Revenue receipts	1,392	25	1,341	34	29	1,340	4,073	36	..	..	
	5,645	100	3,947	100	100	1,666	11,258	100	..	..	

Outstanding debt at March, 1920 :—

	Per cent.
Bonds (+ Savings Certificates) and War Loans	= 65
Floating debt	= 18
Foreign debt	= 17
	100

(*Exclusive of pre-War debt*, 650 *million* £, *of which* 317 *million* £ *has been converted*).

Approximately half the floating debt represents the cash equivalent of Government longer-dated debt.

Total	7,502	..
Less pre-War debt converted ..	317	.. −317
	7,185	
		1,019
Conversion of short-dated into longer-dated Government debt		401
(718 *million* £ *less pre-War debt conversion* 317 *million* £).		
Cash equivalent of Government short-dated debt to replace debt cancelled or matured		618
		1,019

* 150,000,000*l.* cancelled. † 100,000,000*l.* repaid. ‡ The bulk of this amount was raised after April, 1917, when America entered the War.

CHART B.

National War Bonds and War Savings Certificates

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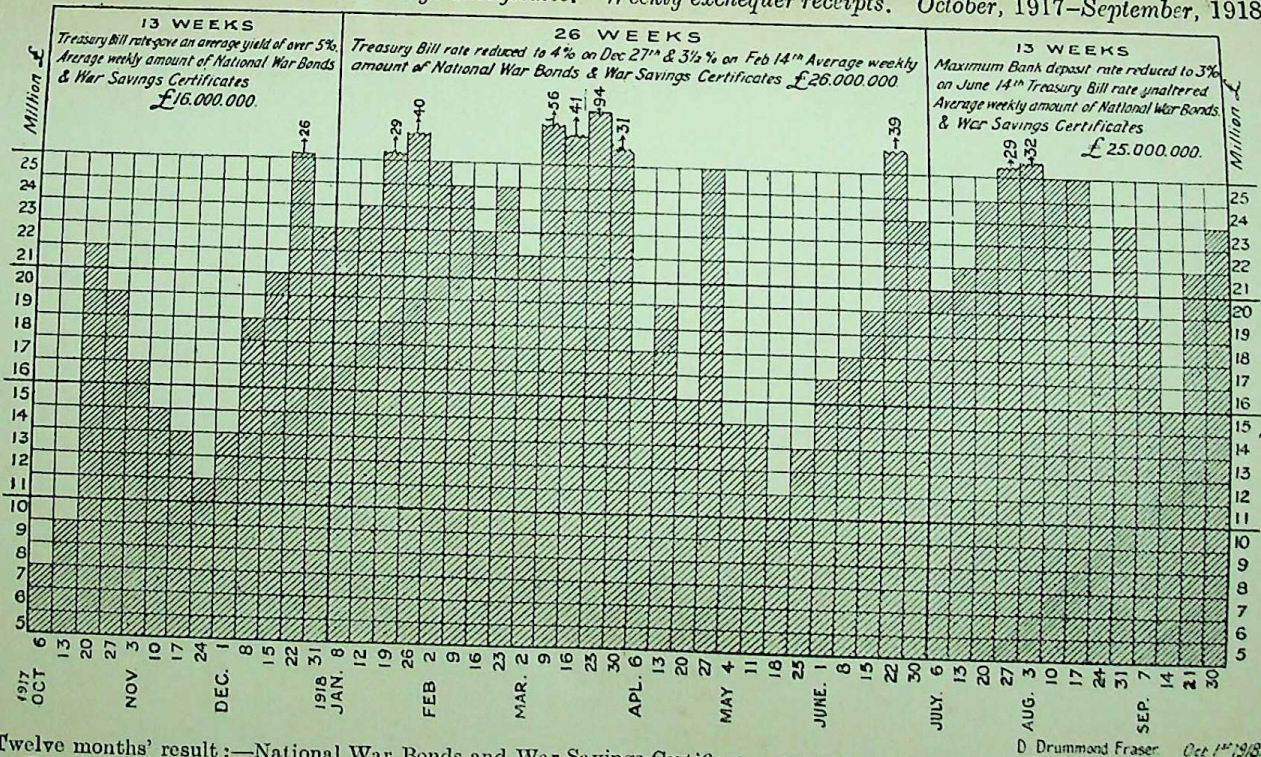
CHART B.

National War Bonds and War Savings Certificates. Weekly exchequer receipts. October, 1917–September, 1918.



Twelve months' result:—National War Bonds and War Savings Certificates, 1,200,000,000*l.* Weekly average, 23,500,000*l.*

Treasury Bills outstanding:—

=13 weeks { Sept. 30, 1917, 949,112,000*l.* / Dec. 31, 1917, 1,058,175,000*l.* | 26 weeks { Dec. 31, 1917, 1,058,175,000*l.* / June 30, 1918, 1,060,289,000*l.* | 13 weeks { June 30, 1918, 1,060,289,000*l.* / Sept. 30, 1918, 1,108,525,000*l.*

Reprinted from *Economist*, October 5, 1918.

Average weekly receipts of National War Bonds and War Savings Certificates since September 30, 1918, are now 28,000,000*l.* (December, 1918).

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CHART C.

Joint Stock Banks of England (exclusive of Bank of England).

PERCENTAGE TO TOTAL LIABILITIES, OF

Deposits —·—·— Discount & Advances ····· Investments .....
Cash and Money at Call ——— Capital and Reserve —·—·—

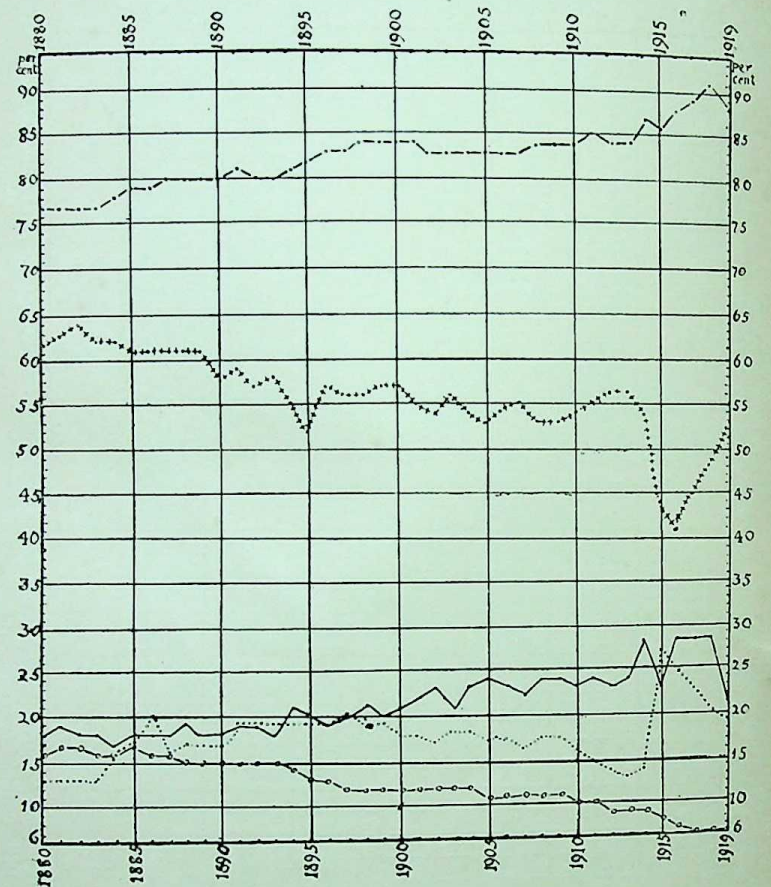

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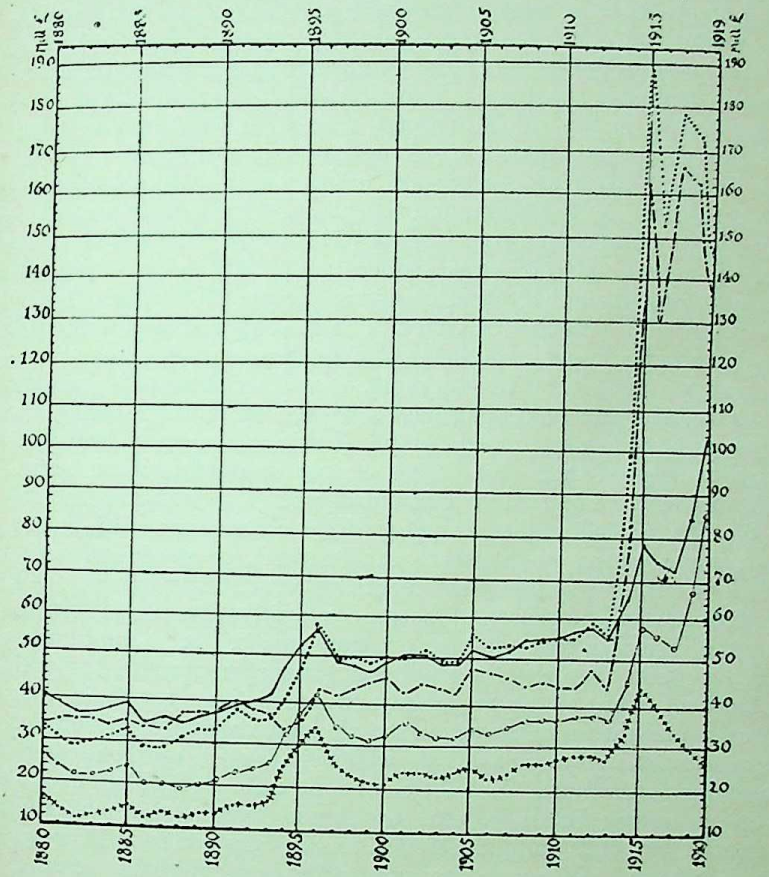
CHART D.

Annual averages of the weekly statement of the Bank of England.

Notes Issued ——·——·—— Gold -·-·-·-·- Reserve ·····

Deposits (Public & Other) ····· Securities (Government & Other) —·—·—



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Discussion on the Paper.

Mr. Hartley Withers: I am sure I shall easily carry the Society with me in moving a vote of thanks to Sir Drummond for his extremely interesting and suggestive paper, which has evidently involved an enormous amount of work and industry in its preparation. At the same time, I hope he will allow me to venture to suggest that one cannot help feeling a certain amount of doubt as to whether a bond on tap is really the solution of all our financial problems as he appears to think. Of course, a bond on tap has a very nice sound about it; and there is no doubt whatever that its introduction, mainly owing to Sir Drummond's unremitting exertions during the War, produced a state of things which was a very great improvement on the huge spectacular loans stirred up by whirlwind campaigns and so forth, which produced a great deal of inflation and financial convulsion. But I think we have to remember that even then the National War Bonds were not necessarily quite all raised on a cash basis, as Sir Drummond tells us. I think we can remember very hysterical appeals being made by the authorities with a good deal of success. Rivalry was stimulated between one great provincial town and another; and we had the cries of "Feed the Guns," and so on, all of which was effective in making a large number of people subscribe money to National War Bonds during the War—not money which they had actually saved, or had any prospect of saving, but money which they borrowed from their banks and hoped perhaps to pay off some day. I think that even during the War Bond period there was thus a certain amount of manufacture of fresh credit. The system was not so entirely clean and spotless as Sir Drummond rather implies. The consequence, of course, as always happens when people are induced, or practically compelled, to subscribe for or buy securities which they cannot really pay for and hold, is that they become a very bad market. All the securities issued during the War are now standing at a considerable discount; and even the National War Bonds, in spite of the great protection given to them against depreciation by their early maturity and the premium which their holders receive on redemption, are not immune from this disease which is afflicting all the securities issued during the War. But the chief contention of Sir Drummond's most interesting Paper is, that we should resume this system of borrowing by bonds on tap instead of raising taxation to meet maturing obligations. Of course, from the point of view of the taxpayer, that is an exceedingly comfortable doctrine, and it is not at all to be wondered at that this view was adopted with acclamation by the Manchester Chamber of Commerce when it was put before that body by Sir Drummond. All of us would be rather invited to subscribe to a nice security than pay taxes. Still, I think there is something to be said, especially in a Society of this kind, where economic theory is allowed sometimes to have certain importance,

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as to the relative advantage of really paying off debt, which you do when you tax people to meet it, or simply renewing it, which you do when you ask someone to lend you some money to pay a maturing obligation. The Chancellor's view is that as long as he had revenue coming in on a large scale, and as long as he has considerable assets to realize, it is his duty to pay off debt as fast as possible out of revenue. If you can call the sale of assets revenue, surely there is a good deal to be said for this point of view, especially in normal times. But I think we must concede that, at the present moment, the outlook in industry and the whole financial position is so black that there is a very great deal to be said for Sir Drummond's contention that borrowing rather than taxation is the easier way and perhaps the better way. I hope he will explain to us what he means, when he asked whether it is not too great a strain on the current income of the people to increase taxation to meet a maturing debt when it could easily be replaced by a bond. Is not it exactly the same strain on the current income of the people if you get them to subscribe to a bond, as if they paid taxation? If you really get the money from them, the strain on income is exactly the same. Still, I think we have to admit that at this time, when industry is in a very uncomfortable state, that to give a man the option of providing this money if he feels inclined to and then paying him interest, has a good deal to be said for it. But I venture to suggest to Sir Drummond that there is a further and still more serious objection to his suggestion; namely, that it has already been tried —and it has been tried for some time past—and it is utterly failing to produce enough money. Of course, he would tell us that the present issue of Treasury Bonds is not exactly the kind of security he wants. He wants something with a fair rate of interest and repayable at a premium. But what would be a fair rate of interest now? At the present moment the Treasury is offering 7 per cent. as long as the money market is at its present level, and it is getting an absolutely pitiful trickle of money. The tap is turned on, but nobody wants to drink. That being so, what kind of security and what kind of rate would he have to offer if he is going to raise anything like the sums required by the present position? And if he is to continue to borrow at 7, or even at 6 per cent., is it really sound finance to raise money at 6 and 7 per cent. to meet maturing 5 per cent. debt to any extent which can possibly be avoided? Even then, whatever the rate of interest he offered, would he be sure of being able to get the money that he requires? After all, I believe that the chief reason why the Government is getting so very little money on this system of bonds on tap, which it is now in vain dangling before the public, is because the public thoroughly distrust the Government, owing to the extravagance with which the public credits it, rightly or wrongly. I do not believe that the public now would subscribe any considerable amount to the Government under any circumstances, unless and until we have got a Government which will really drastically reduce expenditure and

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show that economy is the first thing it is determined to carry out. I venture to suggest that Sir Drummond has rather omitted the very great difference in the circumstances which ruled at the time of the highly successful issue of War Bonds during the War, and those which are now prevalent. Then, of course, the Government had the investment market absolutely corralled. Nobody else was allowed to issue a security without the consent of the Treasury Committee, and the Treasury Committee very regularly sat on any suggestion which was put before it which could possibly be turned down; and the consequence was that the Government had the market absolutely to itself; nobody was allowed to send money abroad. And there was the patriotic stimulus during the War. Now the whole thing is the other way round. There are all kinds of attractive issues being offered to the public—some of them perhaps not so attractive as they look; but still the public does not know that. Then, one is allowed to send money abroad. There is the Housing Bond campaign, which is using up a great deal of the appeal to local patriotism that was so effective during the War for the National War Bond Campaign. Then there are all kinds of magnificent industrial concerns offering one short term notes, some of which are officially described as "secured." Altogether there is a feast spread before the investor nowadays which is likely to cause him very severe indigestion some day. In that frame of mind he is not likely to be subscribing very freely to the Government humdrum issues, quite apart from the general conviction, especially in the minds of the investing public, that the Government is hopelessly extravagant, is taxing them much too high, and that the only way in which to force economy on the Government is not to give it a single shilling that one can help. With these very deferential criticisms, which I am sure Sir Drummond will excuse, I have very great pleasure in moving a very hearty vote of thanks to him for his most interesting Paper.

Sir Felix Schuster: Mr. President: I have very great pleasure in seconding the resolution which has been so eloquently and ably proposed by Mr. Hartley Withers. Perhaps I might be permitted to use this opportunity of offering my personal and sincere congratulations to Sir Drummond Fraser for the persistent efforts he has made in advocating the merits of this bond on tap—not a very elegant phrase, in my opinion, and I hope he has not invented it. I remember well in the early days of the War, discussions that took place at the Treasury when Sir Drummond forced his views upon the Authorities and upon others, at a time when we were not quite so convinced of the merits or success which these Bonds have attained. It is a dangerous thing to differ from Mr. Hartley Withers.

Mr. Hartley Withers: Not at all.

Sir Felix Schuster: Yes. He always has the last word. But I think his criticisms of the success of the bonds on tap—that is,

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the War Bonds—on the ground that they led to inflation through borrowing from the banks, although it is quite fair and just up to a point, might not have been so emphatic if he knew all the circumstances, as Sir Drummond Fraser and I are in the position to know them. I can tell him that these advances on War Bonds made by the Banks have been reduced and paid off in a fashion which none of the banks expected. They have now been reduced to a very small amount—the figures almost insignificant—and thus the investment actually represents the savings of the people. Personally, I am a strong supporter of the bond on tap in its appeal to the pockets of the people direct. There is at the beginning of the Paper a good deal of really controversial matter, about which a good deal might be said as to the question of effect and cause. Is the rise of prices due to inflation or to other causes which lead to inflation? These are matters on which, perhaps, another Paper might be written and debated on here, but which do not directly arise out of the Paper before us to-night. To my mind they are like the insoluble puzzle of the hen and the egg: you do not know which comes first. There is no doubt that there are a great many reasons for rise in price quite independent of inflation. We can all think of them; they are obvious to everyone. But at the same time inflation has been produced, of necessity almost, by these abnormal rises in prices, which have been exaggerated again through inflation; of this there can be no doubt. It is a tempting subject, but I will not pursue it any further at this late hour. I will deal with the suggestions which, after all, are the practical outcome of this Paper. As to No. 1, I give my unhesitating approval of the suggested removal of the restriction of the twopenny stamp duty. I have been perfectly consistent in this view. When the late Lord St. Aldwyn tried it on, I think I was the leader of the opposition which eventually squashed that iniquitous proposal; but on this occasion I was not quite so successful. If, as this hilarity seems to indicate, it is suggested that I speak from interested motives, it shows the effect that this audience attributes to the movement, and that the meeting agrees that it has decreased and does decrease the deposit in banks. That is exactly my point, and I think that this decrease is a bad thing for the country. That the twopenny tax has that effect, there is no doubt at all. There is a further effect. It leads to the hoarding of money. Instead of drawing cheques once a week, we draw them once a month; so that instead of encouraging the banking habit, the habit of thrift among the people, it leads to extravagance. Therefore, I think No. 1 should be pursued and pressed on the authorities. I do not believe they have gained by the tax. I think in some part of the Paper you mention an amount of three million revenue.

Sir DRUMMOND FRASER: Yes. The twopenny cheque produced three millions last year.

Sir FELIX SCHUSTER: Is that the increase?

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Sir DRUMMOND FRASER: No; it is the whole.

Sir FELIX SCHUSTER: Then they have gained only one and a half millions. I think they have lost a good deal in the higher interest they have had to pay on Treasury bills in consequence. Then as to No. 2, I am not quite clear, and I should like to ask Sir Drummond what he really suggests, because he talks of a new bond which has to come from the banks. He wishes to decrease the long-dated security held by the banks and replace it by a shorter-dated security. It is a very excellent idea, but I do not quite know what the exact suggestion is in No. 2. As to No. 3, the offer of a bond to stimulate the habit of thrift; of course, that one would cordially approve. I am not quite sure about No. 4—the removal of restriction on taxpayers who are not tempted to invest in bonds because they are not accepted for payment of taxes. Would you have these new bonds acceptable for all taxes?

Sir DRUMMOND FRASER: For income-tax.

Sir FELIX SCHUSTER: Then how is the Government to live? I am afraid that is rather a dangerous scheme, and I think we have got quite far enough as regards the acceptance of these bonds for payment of taxes. It might necessitate new Government borrowing at a very inconvenient moment. I think that is one suggestion with which I am not in accord. As to No. 5—the establishment of a statutory sinking fund—that, of course, one would cordially agree with; but I think Sir Drummond has rather advocated the abolishing of the general sinking fund.

Sir DRUMMOND FRASER: No; this is in addition.

Sir FELIX SCHUSTER: Then I agree with what Mr. Hartley Withers has said, that certainly the so-called revenue coming from the realization of properties must go to the redemption of debt; I consider, however, that as things are at present, the taxation which we have to submit to in order to keep up all the sinking funds might prove too heavy. But as to the replacement of the floating debt of the Treasury, I have no doubt that the bond on tap would provide a very efficient alternative, if the terms are suitable. Of course, at the present high rate, it is difficult to place these bonds; but, again, experience has taught one that the smaller public—the million of whom you speak—do not look at the rate of interest so much. They want a bond which they understand; and the bond which at present is on tap takes a long time to understand. They want something simple and something they feel they can realize in a moment and get their money back. Whether you give an extra one-half per cent., or 1 per cent., will not, I think, affect them very much. And I most cordially agree with what Mr. Hartley Withers said in conclusion. I meant before he spoke to say something to the same effect, only he has said it so very much better than I could possibly attempt to do. That is,

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that you will not get anything more from the public until they are convinced that they have got a Government and a House of Commons which looks after their financial interests. I do not think the Government is so much to blame as the House of Commons; but until there is a growing conviction throughout the country that those who, after all, have the affairs of the nation in their charge, should consider it their first duty to put the financial house in order, and realize that until their finance is in order no social schemes can be successful—until that conviction grows amongst those who govern us, our credit will be at a very low ebb. People have found it out, and I have heard many say: "Not another "penny will I subscribe to any loan issued by this Government "until I see a proper spirit of economy and financial soundness "amongst our Government." I have very great pleasure indeed in seconding the vote of thanks.

Sir JOSIAH STAMP said that Mr. Hartley Withers had expressed so exactly what he felt about many of the points in these proposals, he did not intend to go over the same ground, but would devote himself to one or two points not so far touched. He thought it might be well, perhaps, for Sir Drummond to clear up a little uncertainty in the early part of the Paper about the periods which he was contrasting. The period of three and a half years ending 1918 was then followed by a reference to ten and a half years ending March, 1919. Either there was an overlapping, possibly, or it was September, 1917.

Sir DRUMMOND FRASER explained that September 1917, was meant.

Sir JOSIAH STAMP said he would refer to two suggestions, the first one of which had already been spoken of. The second had hardly been examined; that was a suggestion that there should be a "removal of the restriction which deters traders and others from "investing bank deposits in Treasury Bonds, such investments "not being considered at present, for E.P.D. purposes, capital "employed in business." Now there was that suggestion touching taxation, and also a further one. He always looked with a good deal of suspicion upon any attempt to bait financial or industrial questions with tax discriminations. One started off, say, by having interest on War Bonds that were free of tax or exempt from tax. Then comes such a proposal as the exception of bonds from the payment of tax, or admitting certain things to be capital which might not be within a business. It rapidly led on, and fed the idea in the public mind that it was a proper thing to make all kinds of distinctions and discriminations in the system of taxation for ulterior motives, really, to finance industry generally. That rapidly led to deterioration of the revenue policy by using it for adjusting all kinds of industrial questions, so that one needed to look rather carefully at such proposals as these before they were

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admitted ; because it was useless to think that the taxation system could be eaten into by these extraneous matters if it were to retain its integrity. The suggestion was that the investment should be considered for E.P.D. purposes as " capital employed in business." The answer was that there were many millions of such investments already so treated. There were also many millions not so treated. Where was the difference or dividing line ? He knew from old Revenue and present commercial experience, that there were very large sums invested in securities which were treated as capital in the business. There were also large sums not so treated. The line was for it to be shown clearly that the capital was required for the business eventually, and was temporarily in this form, or was capital previously engaged in other business assets which has now adopted this form. He understood the Revenue took a very generous view of this provision. But the suggestion that any particular trader could take any particular saving he had, apart altogether from its connection with his business, and could put it in War Bonds, and then describe it as business capital, struck one on examination as perfectly monstrous. Why should a trader, as distinct from a person with a salary, be able to invest his money in this way and count it as capital ? What was the result ? He got 5 per cent. interest, and then he got a tax advantage amounting to 60 per cent., of the difference between the 5 per cent. he brought into his profit account and the 13 per cent. the Government allowed him. So that the community were paying the man who happened to be a trader 10 per cent. on his money. There were many businesses which had more than the statutory rate upon special conditions given to them by the Boards of Referees. Some had 10 per cent. up to 30 per cent. So that it was quite possible in gold mining and other concerns, which would put money into those investments which otherwise they might distribute as profits, that the State would pay them for their investments, not 5 per cent., but 15 per cent., 20 per cent., or even 25 per cent. Why should that be ? With the present working arrangement, if it could be shown to be business capital, then it should be so treated. Business men had quite sufficient benefit from that method already, and he did not see why there should be discrimination between traders and people like themselves. It did not end there. Under the present wording of the law, it looked as if any capital in the business which showed depreciation when it was written off would have the sum written off allowed as an expense. Suppose Excess Profits Duty came off and there was depreciation of 12 per cent., why should the trader have 60 per cent. of that depreciation restored to him ? It only required a little investigation and knowledge of the facts to show that suggestion No. 2 was wholly unworkable. Something might be said along the line that the Government did not interpret the question of what was capital in a business properly, but that was quite another matter. But the suggestion here was that the trader should be able to invest his money indefinitely and secure the

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special advantage. The next suggestion, No. 4, to which Sir Felix had made reference, was for the removal of the restriction on taxpayers who were not tempted to invest their money in Treasury Bonds owing to the fact that these were not accepted for payment of taxes. He asked: "What happens when you do pay taxes with bonds?" The Government got their money a little earlier than otherwise; but ultimately the bonds came up in payment of the taxes, and presumably would be cancelled, so that it was practically the same as getting cash in advance under discount. Examination showed where it led. Suppose the whole of the Income Tax and Excess Profits Duty were paid in this way, and that when it became due the Government had already had their cash and reduced the floating debt by six hundred millions with it, then, the taxes being paid in bonds, when the Government wanted to pay soldiers, Cabinet Ministers, and all other people to whom they distribute their money, they would have no money to do it with. If they offered the bonds, nobody could use them. Then they would have to borrow again on the floating debt, and up it would go again almost to its old level. All they would have had was what they would have originally had, *i.e.*, cash from taxation—the Budget surplus of receipts over expenditure in cash to apply to the floating debt. All the devices for accepting bonds for payment, either by Capital Levy or a War Wealth Levy, or long-dated securities, had no effect, or practically no effect, as a remedy for the floating debt. He supported the vote of thanks to Sir Drummond for having brought this interesting topic forward.

Mr. Spring Rice asked what Sir Drummond meant by the use of the words "self-liquidating" as applied to a Government security which happened to be short instead of long?

Sir Drummond Fraser said that, from a banker's point of view, a self-liquidating security was full payment at par value, plus premiums, if any, at the mature date.

Mr. Spring Rice said when banks lent money to their customers on some business making profit, that liquidated itself, and the goods came to market where they knew there was a market. That was a security which did liquidate itself, but he could not see that there was any difference between long securities and short securities: that the short securities rather than the long securities could be called self-liquidating when there was no economic advantage being gained.

Sir Drummond Fraser said he would ask Mr. Spring Rice a question. When the 5 per cent. War Loan of 2,000,000,000*l.* was due for repayment, were the Government going to pay the 2,000,000,000*l.* in cash? The bonds payable in five or ten years had to be paid in cash. That was the meaning of "self-liquidating." He only applied the term to the case where the holders would get their money back in full.

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After some further discussion of this point, the PRESIDENT suggested that the question might be dropped.

Mr. R. G. HAWTREY said that, like the other gentlemen who had spoken, he was very grateful to Sir Drummond Fraser for raising the numerous and interesting questions involved in his Paper, which he, personally, had found very stimulating. Mr. Withers had interpreted it as a recommendation for refunding by bonds on tap, in preference to repaying by sinking fund. That, no doubt, was one of the points in Sir Drummond's position. But another—and, as he understood it, the more fundamental—was a preference for bonds on tap over spectacular loans, or what you might call "loans "by the bucket." Sir Drummond set out to prove his points in the first instance empirically, and he (the speaker) was at first favourably impressed by the very ingenious arguments brought forward; but on further consideration one was almost forced to the conclusion that it was impossible to make a complete case from empirical evidence drawn from the War period. To begin with, it was necessary to bear in mind that the difference between bonds on tap and loans by the bucket was not quite so fundamental as at first appeared, because during the War everybody knew that it was a national obligation to save, in order to subscribe to War loans, and they prepared for loans in advance. There was the regular movement, for example, in Treasury bills, which rose to a maximum before big loans, and were then repaid and reduced to a comparatively moderate figure. Then they went on rising again in the following interval. That was partly because people held money idle in short-dated securities and Treasury bills, in the expectation that the same money would be invested as savings in the next loan. Then, when the loan came, a part of it was raised out of the money which had been kept ready for the purpose, not only in Treasury bills, but in bank balances. Part of it, again, was raised in anticipation by borrowings. As Sir Felix Schuster mentioned, those borrowings, in order to subscribe to loans, were repaid faithfully, because the people who borrowed in order to subscribe to a War loan were investors, who intended to save that money. They saved it and redeemed the advance in a reasonable time. For that reason, even when you issued loans by the bucket, you were, in fact, drawing from the tap both before and after the loan came out. Turning to the interpretation of the figures on which Sir Drummond Fraser relied for his comparison of the two methods, the dividing date was taken as September, 1917, when National War Bonds began. That was six or eight months after the great War Loan at the beginning of 1917. It was pointed out that the amount of floating debt incurred in the period from the beginning of the War to September, 1917, was large. It exceeded 1,000,000,000*l.* On the other hand, it was shown that in the following period from September, 1917, to March, 1919, the increase in the floating debt was comparatively moderate, say a couple of hundred million

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pounds. But if, instead of taking September, 1917, you merely jumped back to the end of the previous loan, you found that the floating debt was then down to 700,000,000*l.* It rose from 700,000,000*l.* in March, 1917, to nearly 1,200,000,000*l.* in September, 1917, so that there was a very large accumulation of floating debt in anticipation of the next loan. The next loan was the National War Bonds, and the money which would have been swept up into the bucket was swept up by National War Bonds after September, 1917. Again, Sir Drummond took as the concluding period March 31, 1919. March 31 was a time at which there was a seasonal reduction in the floating debt, owing to the then recent collection of income tax. Going three months back, you found that on December 31, 1918, the floating debt was no less than 1,550,000,000*l.*, as compared with 1,412,000,000*l.* at the end of the following March; and at the end of June following it was 1,570,000,000*l.* again. That showed how very dangerous it was to build on figures of the floating debt at particular dates. Another thing which he (the speaker) thought was of first-rate importance was that in April of 1917 the United States declared War. A great part of the strain on our finances that made itself felt in increased floating debt in the period before April, 1917, was raised by borrowing in the United States afterwards; and Sir Drummond's tables show that the increase in "other debt" was as much in the year and a half to March 31, 1919, as in the whole of the preceding three and a-half years. Finally, and perhaps this was the most important point of all, there were Bonds on tap from July, 1915, to the end of 1916. For eighteen months there were Bonds on tap; so that the whole of the comparison fell to the ground absolutely. The only time when there were not Bonds on tap was, first of all, at the beginning of the War up to June, 1915, when the first War Loan came out, and in the interval from March, 1917, up to September, 1917, between the big War Loan and the beginning of the National War Bonds. So that, even if you could establish a very marked difference between the financial soundness of the two periods, you would have proved practically nothing, or very little. Of course, you would have the advantage that there were Bonds on tap all the time in the concluding one and a-half years, and only a portion of the time in the preceding three and a-half years; but that was a comparatively minor difference. In spite of these criticisms, he did not want to raise any real objection to Sir Drummond Fraser's view that the Bonds on tap were preferable; and there was a very important aspect of the matter at the present time. It distinguished the present time from the War period. In the War period all other openings for investment, or nearly all of them, were closed. At the present time there were competing openings for investment; and consequently if you did keep your Bonds on tap, you might gain savings which otherwise would go into industrial securities, or foreign bonds, or other openings. So that there was apparently, a definite advantage now in getting money from Bonds

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on tap, which did not exist during the War. Then, to turn to the other side of the question, the preference for Bonds on tap to a sinking fund paid out of taxes, that was a totally different kind of question. The real question there was not as between the Bonds on tap and the sinking fund, but between borrowing of any kind and a sinking fund; and it was not merely as between borrowing and a sinking fund, but between less borrowing with a sinking fund and more borrowing without a sinking fund, because we could not get on without some borrowing. We are perpetually turning over Treasury bills, and there are large stacks of War Bonds falling due every year in the future for a long time to come. So that you almost certainly must borrow a considerable amount for funding. But he must say he thought it was a very dangerous doctrine indeed to advocate borrowing in lieu of sinking fund. Complaint was constantly heard of the weight of taxation. The chief objection to the weight of taxation was not that it left us less money to spend on ourselves. However unpleasant it might be, we most of us felt that, in so far as we refrained from spending money on our own consumption to pay our taxes, the taxes were doing us very little harm. But the objection was, primarily, to the withdrawal of capital from industry. That was the main objection to heavy taxation; but the essence of a sinking fund was that it paid back into industry the capital which had been withdrawn from it. Not merely did it pay capital back, but it took money from people who had been compelled to be economical to pay their taxes, and then by redeeming debt it set free practically the whole of the same sinking fund as fresh capital seeking investment. That was the vital advantage of a sinking fund; whereas on the other hand, all your funding operations, in so far as they were real funding, and not merely renewals, that is to say, in so far as you were substituting long-term for short-term debts, represent taking money out of the investment market and annihilating it. If you redeemed Treasury Bills and simply deflated by the process, you cancelled the credit that you got out of your subscriptions to a funding loan, and to that extent you took away capital that could otherwise be put into industry and business. There was a passage in the Paper which seemed to him rather to suggest a wrong interpretation of banking statistics. On page 32, figures were given of the cash in the banks; and the argument seemed to be—possibly he had misinterpreted it, but he was combining this with the statements in the appendices—that the addition to the cash in hand and at call in the banks represented in some sense savings which are available. He must confess that this did not seem to him to be a true interpretation of banking statistics. The whole of a bank's liabilities practically represented the working balances of people who used credit as purchasing power, and they had large balances because their turnover was large, and prices were high. The cash in hand was merely a paper entry, practically, as between the Bank of England and the other banks. In so far as it was in legal tender

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money, it was practically a liability as between the banks and the Government. It did not represent wealth in any sense, but was an arithmetical device resorted to by banks in order to give themselves the requisite appearance of liquidity.

Mr. H. Joy said he had gathered a few figures before he came along which might be of some interest to the meeting. He found that, as regards the small investor—and he only spoke of the small investor—in the continuous system of borrowing, which has extended over forty-seven months, there were, roughly, 4,000,000 subscriptions for 114,500,000*l.*, with an average of, roughly, 29*l.* per subscription. The system of the short appeal lasted nineteen weeks in all, and attracted 2,600,000 subscriptions for 98,500,000*l.*, with an average of just under 38*l.* per subscription. The total subscriptions to issues of War Stocks or Bonds from the small investor from June, 1915, up to last Saturday—the figures were not quite complete, but embraced practically the whole—were 6,600,000 in number for 213,000,000*l.*, giving an average of 32*l.* If one might draw a deduction from those figures, it would seem that the spectacular appeal was the one which brought in the large sums of money, although it created considerable disturbance. The 4½ per cent. Loan, especially, created very considerable disturbance in small balances, yet this became less in the case of the later appeals, and the advertisements during the Business Men's Week of the National War Bonds issue set up little disturbance. Money comes in in larger quantities from the spectacular appeal, and is just as useful as from the continuous borrowing; but on technical grounds the system of continuous borrowing not only caused, he thought, less disturbance in accounting, but had also less effect on Savings Bank balances.

Mr. T. B. Johnston said he would like to say that he heartily supported the very practical scheme put forward by Sir Drummond Fraser. He was particularly in favour of the suggestion as to the removal of the restriction of the 2*d.* stamp on cheques. If it were possible that all cheques under 2*l.* could be stamped free, almost a revolution could be effected in our economic conditions. We, as employers of labour, could pay our workmen by cheque, and they in turn would pay their butcher, baker, and so on, also by cheque. In that event we could almost be in the position literally to follow the advice of some learned professor who urged us to burn our notes. Mr. Hartley Withers rather criticized the scheme, as he understood it, on the ground that it was not in strict accord with economic theory; but perhaps that was not altogether a disadvantage. On the contrary, he rather inclined to think it an advantage; and in that connection he was always reminded of what Bismarck said in the Reichstag when he was passing the tariff bill which laid the foundation of Germany's greatness: "Who are "my opponents? They are livers on dividends, lawyers, pro-

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"fessors who have no practical experience of business, and who "have got all their knowledge from books: who neither sow nor "spin, nor reap." But as one of those who sow and also spin and would very much like to reap, he agreed with Sir Drummond's Paper.

Mr. A. HOARE said he would like, if he might, to make a suggestion not strictly in connection with the subject. He hoped that before long some member of the Society would bring forward a Paper discussing the future taxation. We must have taxation. Everybody hated it; but he did not see any symptom of discussion in the newspapers on the system of taxation as a whole which would produce the requisite income—that which the Government must have to enable us to pay our way. He threw out this hint, and hoped some Fellow of the Society would deal with this question of future taxation and cover, as far as possible, the whole ground, not only of national taxation, but also of local taxation, which had practically attracted no attention at all.

The PRESIDENT said that he regarded this very interesting subject mainly from the point of view of the ordinary taxpayer, who took a somewhat languid interest in the manner in which the Government extracted his money from him, and whose attitude generally was that expressed by one of the speakers, who said that he was anxious not to pay a shilling more to the Government than he could help. One might, perhaps, remark on the very mundane terminology used in these Olympic heights of finance. It was not only when one thought of the flow of money, which might be described as being "liquid"; but when one came to "Bonds on tap" and something else in "buckets," one felt at any rate that even to the outsider in these matters there was one touch of Nature that makes the whole world kin. He should, perhaps, say one word with regard to what Mr. Hoare had said. He had been good enough to make a suggestion that the Society should consider the advantage of having a paper read on the future of taxation, with a view to some scheme being presented for discussion, which would presumably aim at making taxation more acceptable to the public at large than it is at present. He might assure him that that suggestion would receive the serious consideration of the Council. He now had the greatest pleasure in conveying to Sir Drummond Fraser the cordial thanks of the Society and of this meeting for his most admirable and interesting address.

Sir DRUMMOND FRASER, in reply, said that he very much appreciated the thanks he had received for the Paper, and for the manner in which various people had spoken. He fully expected to have a good many awkward questions to answer; but he found there was nothing of a very serious nature brought against him for propounding his somewhat revolutionary though practical financial suggestions? He thought Mr. Hartley Withers was on the right road. He seemed to believe that the Bonds, after all, were going

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to be the best solution. But he did not realize how quickly the money borrowed for the Bonds is repaid. Taking the 5 per cent. War Loan of 1917, for instance; this was the successful spectacular Loan of the War without any question; and its success was due, very largely, to the tremendous amount borrowed from the banks for subscription to the Loan. Even the Bank of England could not tell the Treasury immediately the amount that was subscribed, and it was given out to the world that the amount was 700,000,000*l.*, whereas, as a matter of fact, it was 1,000,000,000*l.*; but it took them several days to find that out. The extraordinary feature was that individuals came to the banks to borrow as much as the banks would lend. Corporations were induced to borrow from the banks in order to subscribe. And what was the result? The individuals cut down luxury expenditure in order to repay, and bankers were amazed at the rapidity with which the bulk of the loans were repaid. His chart was not intended to suggest for a single moment that manufactured money was the whole cause of the rise in prices. There were other causes as well. But he did suggest that the first check to the rising prices was undoubtedly due to the manner in which people saved money in order to repay those loans for the 1917 War Loan, which was thus of the nature of a continuous loan. Now, as to Corporations, they were forced, owing to the public local demands and the Treasury requests, to invest large sums in that Loan. And in a great number of cases they had repaid the loans by the operation of their sinking funds. To apply the cash for the sinking funds in payment of a bank debt is quite a sound financial policy. Then, with regard to the strain of either paying maturing debt by taxation or by some form of loan, his feeling was that with the Bond system you got the cash equivalent from good money to replace bad money. It was much better to find the cash equivalent from a bond of five years than from either excessive taxation, or from Treasury bills of three months. The collection of the small money by Bonds, to which Mr. Joy, of the G.P.O., referred, was very striking. The Treasury Bond, with the Saving Certificates, is the one security that can replace bad money with good money. Anyone to-day can go into any bank or Money Order Office and get the Post Office issue of these Treasury Bonds entered in a pass-book for any amount. Interest is calculated from the day the money is paid over the counter. In Manchester the Treasury have experimented with a systematic small daily advertisement of these Bonds. And the cash receipts in the Manchester area for November are three times what they were in October in consequence of that daily advertisement. This made him feel that if the million realized that every time they had money to spare they could purchase the Post Office issue at their own bank or Post Office, they would do it. Money was got in this way that could not be got in any other way, the bulk of which would be spent if one did not so get it. That answered the point put by Mr. Hartley Withers—that people were now saying that they would

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not find the Government another shilling because they had lost confidence and were not going to support the extravagance of the Government. If they once realized that the cash from all these Bonds went to repay a worse form of debt, and therefore reduced the cost of living, he thought that people would begin to subscribe more fully than they were now doing. The present bad market for Government securities is surely due to the policy of high interest rates! He was much pleased that Sir Felix Schuster agreed generally with the suggestions made in the Paper, especially with regard to the removal of the 2*d.* cheque duty. In the North, banks were actually receiving from firms for the wage-earners the wage they earned each week, and were opening a bank account upon which they drew. They could draw upon that up to 2*l.* without any stamp duty at all. They were gradually leaving money on deposit because the whole of the amount of wages paid was not required for spending. So that, to some extent, this was already proved to be a practical suggestion, and confirmed what Mr. Johnston, as a large employer of labour, had said. In Sir Felix Schuster's reference to the second suggestion, he appears to have some doubt as to its feasibility. It is quite clear that an effective issue of Bonds would reduce bank deposits on the one hand and Government securities, held by the banks, on the other hand. It might become desirable for the banks to hold a Government security for which the public is prepared to apply in exchange for a Government security held by the banks. The inflation of bank deposits was caused by a few book entries. This would be the reverse, viz., a deflation, caused by many book entries, accompanied by a bank credit expansion, if required. With regard to Bonds being acceptable as payment for income tax, one had to remember that with the present rate of income tax, there were a great number of taxpayers who had to set aside month by month out of their monthly earnings sufficient to pay their income tax twice a year. It seemed to him that if the Bonds were accepted in payment of the income tax that necessity would be obviated. A continuous loan of Funding Bonds would keep the Treasury supplied with cash, just as Treasury Bills do to-day. With regard to Sir Josiah Stamp and E.P.D., he should like to say that in his place he would have spoken very much in the same way, though not with the same eloquence. But he (the speaker) was looking at the question purely from the practical point of view. They had fought this matter whenever there was an opportunity in Manchester, and they had just as carefully considered the result of giving special exemption for the investment of a firm's money in Treasury Bonds, as capital employed in their business. From a practical point of view, there is no question whatever that a large sum would be transferred by firms who are now not willing to invest in Treasury Bonds, because such an investment is not considered as capital employed in their business. Every banker in the country knew that there was a possibility of a very large transfer of surplus funds now held by

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firms should this concession be granted. In connection with the Treasury Bills referred to by Mr. Hawtrey, of the Treasury, he thought the best way of explaining his position in this connection was to put it thus. At the present time the outstanding floating debt of, approximately, 1,332 millions, could be divided into four portions of 333 millions. One-quarter was due to the cover required for currency notes. Another quarter represented Ways and Means advances, plus some Treasury Bills. With regard to Ways and Means advances, one might assume that the amount borrowed by various departments of the Government was more than set off by credits of various other departments of the Government which were automatically repaid by the revenue receipts. The other half was due to the accumulations of cancellation of debt. It would be remembered that no less than 150 millions of the first War Loan was cancelled by the first proceeds of the second War Loan ; then came Treasury Bills and then bank overdraft. Thus the cash equivalent of Treasury Bills for cancelled debt (including debt cancelled for depreciation fund and debt accepted for taxes) and maturing debt amounted to something like 666 millions, or half the floating debt. The issue of National War Bonds was withdrawn before they were able to reduce the Treasury Bills. He suggested that two-thirds, or 400 millions odd of the 666 millions, would always be taken up by the general public, because they were Treasury Bills, and because they showed such a good yield. That left about a third, or 200 millions odd, which ought to be assimilated by the people through Bonds, in order to relieve the cash carrying these Treasury Bills, which is required for other legitimate uses. In respect of the increase in the "Other Debt" in recent years, he would remind Mr. Hawtrey that when America came into the War she relieved the situation by lending money to this country and the other countries ; but previous to that we had found dollar wealth by sacrificing our dollar securities. So that in the first part of the War the money that we paid to America for munitions for ourselves and our Allies was found by our dollar securities ; and when America came into the War America found an equivalent amount of money for the same thing by these loans. The amount of "Other Debt" until April, 1917, was only a small sum. When the Bonds were on tap at first in 1916—he did not think they were on tap until the end of 1915—the rate of interest was not adjusted and they were not effective. That was the difference between 1916 and 1918, when the rate of interest was adjusted and the bonds were effective. He did not follow Mr. Hawtrey with regard to borrowing in lieu of the sinking fund. His own point about the sinking fund was this : that we had always been educated to understand the sinking fund to be the excess of receipts over expenditure. According to this, the sinking fund this year was 3 per cent., or 234 millions, a luxury present circumstances do not justify. If one replaced maturing debt by Bonds of five, or ten years, one could, by a sound financial principle, establish a sinking fund of one-half

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per cent. for the yearly repayment of those Bonds. By doing so, the bulk of the increased scale of taxation is set free for reinvestment in trade.

Mr. HAWTREY asked whether Sir Drummond was advocating that they should raise less taxation ?

Sir DRUMMOND FRASER (continuing) said: Yes, less taxation for a sinking fund; because bankers in the country did not believe in the old-fashioned sinking fund—that established by an excess of receipts over expenditure. They did not think this fund could be depended upon. That fund was always raided whenever the Chancellor found it necessary. But a *statutory* sinking fund on the same principle as last year's Funding Loan and Victory Bonds would make the Government provide out of taxation every year x pounds in addition to the interest. This would curb the extravagance of the Government, and would create a sound financial policy for funding maturing debt.

He would like, if he might, to say one word about the question of taxation. At the present time we were dealing with an estimated revenue of 1,400 millions. If one deducted the special receipts and the special charges of 300 millions, one reduced 1,400 millions to 1,100 millions. If one established the sinking fund he suggested, one reduced 1,100 millions to 900 millions. A 900 million budget would include the Post Office and other receipts and the Post Office and other payments of a round 100 millions. Thus one would get down to a taxation of 800 millions. That would provide debt charges and pensions of 500 millions, leaving 300 millions for the Civil Service, Army and Navy and Air Forces, which was double the sum required before the War. Mr. Hawtrey questioned his banking statistics. They were based on facts, which were public property. If they appeared to controvert the canons of traditional economic theory, it was the theory which must give way. The facts could not.

The following Candidates were elected Fellows of the Society:—

Charles William Bigg, F.C.R.A., F.S.S.A.
Oscar Birley.
Anson Lester Boddington.
W. H. Coates, LL.B. (Lond.).
Frederick Craufurd Goodenough.
Joseph Gronow, F.S.A.A.
Cyril Edryk Gwyther, B.A. (Cantab.).
John Yealand Hart, B.Sc. (Lond.).
Henry John Hoare.
Andrew Nelson, M.A.
Geoffrey Stanley Reed.

Corporate Representative.

Edward Darnell, *representing the* Institute of Municipal Treasurers and Accountants.

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MISCELLANEA.

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Molecular Statistics.

By Professor F. Y. Edgeworth, F.B.A.

An article which appears in a recent number of the *Philosophical Magazine* on the "Application of Probabilities to the Movement of Gas Molecules" may deserve to be summarized in the *Journal of the Royal Statistical Society*. For it essays to elucidate the first principles of Statistics, of which the most splendid illustration is afforded by the random movements of a molecular medley.

I. Already in an Address published in the *Journal** attention had been fixed on the interesting circumstance that molecular motion fulfils in a peculiar degree of perfection that law on which a great part of mathematical statistics is founded, the so-called Law of Error. There was offered an explanation of this incident somewhat different from that which is generally adopted by physicists. The rationale proposed is essentially identical with that which Laplace employed to prove that the law of error is fulfilled by averages of numerous independent observations; which reasoning subsequent writers have extended to many other species of statistics. As explaining the prevalence of the law in statistics generally—in vital and social phenomena, as well as the subject-matter of mathematical physics—this explanation appeals particularly to statisticians. It rests upon the proposition that the sum, or more generally a weighted sum, a *linear function*, of numerous quantities, each fluctuating independently according to *any* law of frequency, will tend to fluctuate according to a particular law, the normal law of error.†

It was shown in the Address referred to that this condition is fulfilled in the simple case of spheres dashing about at random and repeatedly colliding with each other. For the velocity (in any

* See *Journal of the Royal Statistical Society*, vol. lxxvi (1913), pp. 170, 190. The abbreviation *J.R.S.S.* will be used in subsequent references to the *Journal*.

† For the present purpose it is not necessary to distinguish between the generalized law of error (*J.R.S.S.*, 1906) and the more familiar normal law.

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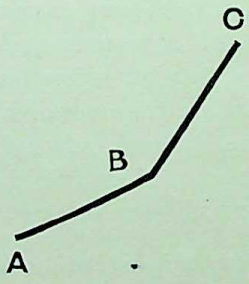
assigned direction) of any sphere is a linear function of the velocities of spheres with which it has previously collided: of constituents which may be regarded as *independent* in the sense proper to the theory of Probabilities. It will be remembered of course that the spheres do not behave like the two bullets shown in an American museum which, having met in mid-air during one of the battles in the Civil War, were flattened out against each other and stuck together. Our balls are supposed to obey the well-known laws of impact in the case of perfectly elastic bodies.

This explanation is now extended to less simple cases. The colliding bodies need not be spherical. They might be shaped like the bullets in a modern rifle. They might be as shapeless as the stones flung from the ancient *tormenta*. They might resemble the "iron sleet of arrowy shower" which, according to the Norse battle-song paraphrased by Gray, "hurtles in the darkened air." Not that the last epithet is particularly appropriate to the present treatment of the subject. For the writer, dealing with Probabilities rather than Physics, does not venture to treat of the case in which the molecules are clustered so closely that each affects all, or at least a great many, in virtue of attractive or repulsive forces. The encounters now contemplated are like duels between aeroplanes occurring here and there throughout a wide expanse of sky rather than "aery navies grappling." In all the cases which have been instanced each of the velocities proper to rigid bodies is distributed according to the normal law—not only the rates at which the body as a whole is moving through space, the three velocity-components of its centre-of-gravity, but also the three velocities of rotation about that centre.

But the theory is not restricted to compact bodies. More generally the colliding corpuscles need not consist each of a single piece. Chain-shot, rather than single bullets, may be the military



analogue. For example, on the simplified supposition of motion confined to two dimensions, each corpuscle might consist of a chain with two or more links such as that shown above, which is meant

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to represent two rods connected by a hinge at B, moving in the plane of the paper. The velocities of which the rates are normally distributed may be the rates at which any point in the mechanism, say the extremity A, is moving in the plane; say, in a horizontal direction, the velocity u, and in the perpendicular direction, v. Also, if AB makes an angle ϕ with the horizontal, and BC the angle ψ, there are the velocities at which those angles are increasing, say $\dot{\phi}$ and $\dot{\psi}$. Then the distribution of these velocities the concurrence of rates equal to (or rather in the close neighbourhood of) any assigned set values for u, v, $\dot{\phi}$, $\dot{\psi}$, is represented by a frequency-function of the form Je^{-hT}; where J and h are constants; T is a quadratic function of the velocities* such as $Au^2 + Bv^2 + C\dot{\phi}^2 + D\dot{\psi}^2 + 2Fuv + 2Gu\dot{\phi} + \ldots + 2L\dot{\phi}\dot{\psi}$; and the coefficients A, B, . . . are *numerical*, depending like the constants on supposed given circumstances. That is, considering the distribution of the velocities over a large area, irrespective of the magnitudes of the angles ϕ and ψ. It is also true that, if we mentally abstract from the enormous "universe" of corpuscles any number of *genera*† each defined by (neighbourhood to) particular values of the angles,‡ each of these genera will separately fulfil the normal law. The form will be the same as that above written, the only difference being that the coefficients, say $a, b \ldots l$, not now simply numerical, are in general *functions* of the angles. It follows, alike with respect to the "universe" or any genus, that the normal law in its simplest form holds good for any *one* of the velocities; *e.g.*, for $\dot{\phi}$ the frequency, say z, is given by an equation of the form

$$z = N\frac{1}{\sqrt{\pi}c}e^{-\frac{\dot{\phi}^2}{c^2}}.$$

So far we have supposed the encounters between molecules to follow the simple law of collision between perfectly elastic bodies. But the more appropriate conception is that molecules, moving for the most part in straight lines, come occasionally within the sphere of each other's influence; a region of dimensions very small in comparison with the free path of the molecule. In that close neighbourhood they repel each other§ according to some unknown law of

* Instead of the components of velocity there may of course be employed the components of momentum.

† These categories are to be distinguished from the "classes" defined below, p. 80.

‡ The *co-ordinates* of the point A do not enter into the expression, only their rate of change, the velocities of the point; since in a medley the *place* of a corpuscle is not significant. *Cp.* below, p. 81.

§ Perhaps after exercising mutual attraction during the earlier stages of the approach.

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repulsion. Their paths, curvilinear in that neighbourhood, become again rectilinear as they move apart. It is as if two skaters moving each in a (different) straight line nearly run into each other, and in their efforts to get clear of each other swerve and strike out each in a new direction. The short and rapid steps which occur during such an encounter elude observation. We may presume, however, that the velocity of an average molecule, free from encounter, depends upon a long series of previous velocities, its own and those of the molecules which it from time to time encounters. Considering the remote progenitors of a present velocity we may regard it as depending upon causes or elements which are both numerous and independent. Those are, indeed, conditions tending to the genesis of the law of error. But they are not the only conditions. It has been strongly insisted in this *Journal* that there is also required in general a third condition, namely *linearity* in the aggregation of the elements. That remains true, with the exception not here particularly relevant of cases in which the failure of the third condition is very slight.* When the aggregation of the elements is far from being linear it cannot be concluded that the law of frequency for the compound is even approximately normal. Yet *some* conclusion may be attainable if the other conditions are fulfilled and also the aggregation, though not linear, is *symmetrical*. In notation employed before† let $\xi_1, \xi_2 \ldots \xi_n$ be the elements, and let the compound be $x' = F(\xi_1, \xi_2, \ldots \xi_n)$. If the ξ's are numerous and independent, and F is a symmetrical function, x' is approximately equal to some function of an expression which is a linear function of the ξ's. Say $x' = f(\lambda)$, where $\lambda = (\xi_1 + \xi_2 + \ldots + \xi_n)$. It is thus proved that the present velocity u' of a molecule is *some* function of the mean value of prior velocities. That the function is *linear* follows from the conservation of energy.‡

Thus the conditions for the genesis of the normal law are fulfilled. In our metaphorical skating-rink, though we do not know the law according to which two that have nearly run into each other strike out on new paths free of each other, still we may be assured that the free movements of the whole party which is rushing about over the immense rink, or any large part of it, will obey a certain rhythm. That rhythm applies not only to the rate at which the skater is

* *See* "The Generalized Law of Error," *J.R.S.S.*, vol. lxix (1906) p. 499 *et seq.*, and *J.R.S.S.*, vol. lxxxi (1918), p. 624; and for the cognate contention that the elements must be independent, *J.R.S.S.*, vol. lxii (1899), p. 536 *et seq.*

† The proposition is readily extended to the case in which each of the variables which enter symmetrically into F is not one of the elements, but one multiplied by a constant, $c\xi$; or even a function of one, $\chi(\xi)$.

‡ *Phil. Mag.*, *loc. cit.* p. 270?

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changing his place, but also to other movements which he may execute, waving his arms or otherwise throwing his limbs about with many "degrees of freedom," as the mathematicians say. There will be a "co-ordinate"* corresponding to each degree of freedom, analogous to the ϕ and ψ above employed to describe the motion of corpuscles shaped like chains. The corresponding velocities $\dot{\phi}$ and $\dot{\psi}$—together with the velocities of *translation*, u and v—will fulfil the law above enunciated with respect to random motion of elastic bodies in a plane.† The theory is readily extended to three dimensions and more complicated mechanisms.

II. The preceding proof that the law of error will be set up in a molecular medley has not the authority of the great mathematicians who have treated of the kinetic theory of gases. The proof preferred by mathematical physicists is distinguished by the use of higher mathematics. Whereas the reasoning above summarised can be followed by one who has not advanced in Dynamics beyond the general method introduced by Lagrange, the sublimer theory of Hamilton is freely employed by Boltzmann and his eminent successors. Nor are they confined within the boundary to which Hamilton extended the science. One of the few who have advanced beyond Hamilton, Liouville, is often invoked. His theorem is introduced at an early stage in order to prove that the system of clashing molecules will tend to a stable distribution of velocities according to some definite law.

No doubt the higher mathematics are required for the advancement of Thermo-dynamics and the other branches of mathematical physics to which the kinetic theory of gases is applicable. But for the humble purpose here contemplated, to explain the genesis of the law of error, the higher methods are possibly less potent than is usually to be expected. So far as the properties of a molecular medley are based upon axioms of Probabilities it is tenable that the value of this evidence is not enhanced by the more refined theories of Dynamics. Thus if it was sought to determine what (if any) is the law of frequency for the sum of the points turned up by a large set of dice tossed at random, it is not to be expected that the conclusion proper to Probabilities would derive much support from the most elaborate dynamical theory about the motion of a cube in a resisting medium. It is justly remarked by De Morgan that "no "*primary* considerations connected with the subject of *probability*

* Of the "generalized" kind introduced by Lagrange.

† As to the *coefficients* of the *function* which has been found—the bye-laws, so to speak, required for applications of the general principle—see below, Appendix A.

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"can be or ought to be received if they depend upon the results "of a complicated mathematical analysis."* Tait, who quotes this remark as "extremely important," goes on to say: "In many of 'the investigations connected with the present subject [the kinetic "theory of gases] alike by British and by foreign authors, "the above remark of De Morgan has certainly met with scant "attention."†

However this may be, it is not attempted here to prove by mathematical physics that the system of molecules tends to a stable stationary state. We may investigate what that state must be if it exists, without more than probable evidence of its existence. This probability rests upon two grounds. There is (*a*) the theory above offered. Does it not meet the objection urged by a mathematical physicist‡ against the kinetic theory of gases: "It has "never been proved that a gas does actually tend towards this special "state" [meaning the distribution of velocities according to the law of error]. Is not actual tendency proved by the preceding theory; considering that analogous reasoning in many other spheres of statistics has been confirmed by actual experimentation? (*b*) There is too a conviction founded on less specific experience, on common sense. In the words of Tait "Every one who considers the "subject from either of these points of view [either ordinary statistics, "*e.g.* of births or deaths, or the mathematical theory of Probabilities] "must come to the conclusion that continued collisions among our "set of elastic spheres will, *provided they are all equal*, produce a "state of things in which the percentage of the whole which have "at each moment any distinctive property must (after *many* col-"lisions) tend towards a definite numerical value; from which it "will never afterwards markedly depart. . . ." The conclusion is extended in the context to the case in which there are "two or "more sets of mutually colliding spheres *no one of which is over-"whelmingly more numerous than another*, nor in a hopeless minority" (Author's italics).

The presumption in favour of an ultimate or stationary state may derive some additional justification from the experience that it has proved trustworthy in a closely analogous case, the explanation of the law of error in statistics generally. One at least,§ and not the

* "Theory of Probabilities" (*Encyclopædia Metropolitana*), *S*, 1.

† *Transactions of the Royal Society of Edinburgh*, vol. xxxiii, p. 256.

‡ *Phil. Mag.*, vol. xxx (1890), p. 95; cited in Bryan's Report on Thermodynamics, British Association, 1891.

§ Another parallel still more germane to the present argument will be adduced below.

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least important, proof of that law, the proof originated by Morgan Crofton, starts from the assumption that there is an ultimate law of frequency which tends to be fulfilled by compound quantities formed by the continued superposition of independent elements. The proof is achieved by showing that the existence of such a law implies conditions which can only be satisfied by the law of error.

Supposing it granted (on whatever grounds) that there is an ultimate distribution of velocities to which a system of colliding molecules must tend; the reasoning which is regarded by high authorities as the main proof that this ultimate law is none other than the normal law of error is based upon a theorem, due to Boltzmann, commonly known as the "H" theorem. This theorem is of great interest to the statistician. For it is closely connected with a method which plays a great part in the higher statistics, namely Professor Pearson's celebrated criterion for estimating goodness of fit—the fit of a proposed formula to a given frequency-group or "histogram." The method may be regarded as consisting of two stages. First, it is shown that the probability of obtaining the *particular set* of observations as a random specimen of the proposed theoretical frequency-group is approximately proportioned to $e^{-\chi^2}$. To use our own illustration: imagine an immense medley formed by sets of balls of different colours mixed up in assigned proportions. A large number, n, being extracted at random the probability that the particular number of red balls which has been obtained, say n_1, together with the observed number of white balls, say n_2, and so on, should have occurred by chance is shown to be of the form $Je^{-\chi^2}$. The next step is to evaluate the probability that a divergence from the most probable set of numbers (say n_1', n_2' . . ., corresponding to the proportions in which the balls of different colours are mixed up in the medley) at least as great as the divergence which is presented by the observed set of numbers n_1, n_2 . . . should have occurred by mere chance. Professor Pearson's masterly computation of his "P" corresponds to this second stage.

At present we are concerned only with the first stage. Boltzmann and his successors show that the probability of a certain given phenomenon may be expressed by Je^{-H}, where H has a known relation to the function which represents the ultimate distribution of the velocities in the molecular system. But they employ H not so much for the computation of a probability corresponding to the Pearsonian "P," but rather for a purpose analogous to that for which the present writer has employed χ^2 in this *Journal*, with reference to the representation of statistics by mathematical formulæ*

* *J.R.S.S.*, vol. lxxvii (1914), p. 724, *et seq.*

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One of the problems occurring under that head was the following. Given some of the *percentiles* for a group of observations regarded as a random specimen of an indefinitely large frequency-group of which the *form* is given, but not all the *constants;* to determine the best value of the unknown constants. Form χ^2 in terms of these constants; and then treating χ^2, not of course as a *measure* but, as an *index* of the Pearsonian P—as a quantity which ever decreases with the increase and increases with the decrease of P*—determine the constants so that χ^2 should be a minimum and accordingly P a maximum. Analogously in the case now before us there is a certain datum, namely the circumstance that the mean energy of any large group of molecules is constant. But the quæsitum is not now the constants of a function known as to its form, but the form itself of that function which represents the ultimate distribution of velocities. By a use of the Variations Calculus, analogous to the use of the simple Differential Calculus to determine the most probable value of a frequency-constant, it is found that the most probable form of the sought function is the normal law of error.

It must be admitted that this application of Probabilities to discover a law of nature is somewhat paradoxical. It is peculiarly open to the criticisms which Dr. Venn has directed against the inordinate use of *inverse probability*. Ordinarily when that method is employed to ascertain a constant pertaining to a given function, *e.g.*, the mean or modulus of the error-function,† we may think of the given form as occurring in the long run of miscellaneous experiences, in connection now with one now with another value of the constant. We may intelligibly enquire with which value of the constant in the course of experience the given observation is most frequently attended. But when the quæsitum is not a magnitude but a *law* of distribution, and the datum is not an observation but a law of nature, the conservation of energy, can we think of the datum as associated with different laws of distribution—in different medleys !‡

* *Cp. J.R.S.S.*, vol. lxxvii (1914), p. 850 note.

† *Cp. J.R.S.S.*, vol. lxxi (1908), p. 384, *et seq.*

‡ The physicists are not concerned to call attention to the paradox. But they do not conceal that the proof by way of the "H" theorem is based on the theory of Probabilities. Thus Boltzmann with reference to a law which is closely connected with the distribution of the velocities in a medley of gas molecules, namely the second law of Thermo-dynamics, maintains that if it is required to prove (*ableiten*) that law in all its generality one must start from no other first principle than that of the Calculus of Probabilities. "Weitere Bemerkungen," *Akademie der Wissenschaften*, Vienna, 1879 (*Mathematisch. . . Classe*), vol. 77 (referring to vol. 76), p. 7.

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Nevertheless the method is justified by experience. It proves to be trustworthy in a cognate case, the law of error in its application to statistics in general. By reasoning of parity with that just now employed there is deduced a law of frequency, the normal law, which actual experience verifies throughout wide tracts of nature. The principal datum in the case of general statistics is, indeed, remarkably analogous to that on which the mechanical theory now under consideration is based. The comparison may be conveniently confined to the simplest instances; with a loss of generality which the mathematical reader will easily make good. Suppose then on the one hand equal bodies moving in a line* and colliding at random with each other; the centre of gravity being fixed. On the other hand, suppose elements varying according to one and the same law of frequency about their centre of gravity to be fortuitously aggregated so as to form a compound magnitude. There you have resulting velocities; here you have composite magnitudes. There you have the datum that the mean square of the resulting velocity is constant independently of the number of collisions; here you have the datum that the mean square of deviation for the compound is constant independently of the number of constituents.† So similar are the main conditions. There is also a formal condition which is identical in the two problems; namely, that the summation of all the possible values, the *integral* between extreme limits, of the function, say f, which assigns the *proportionate* frequency of each degree of magnitude should be *unity*. Subject to those conditions there is to be minimised the index "H"; which has the same form in both problems, namely the sum or integral (between extreme limits) of $f \log f$. By a stroke of the pen, almost as if it were a wand, there is elicited from the formulæ of Probabilities‡ a fact established by observation through-

* *Phil. Mag., loc. cit.*, p. 249. The molecules moving along the line must be conceived as capable of passing each other, say by way of side-tracks. *Cp.* Appendix B.

† This enunciation has reference to a special notation, one which implies that the mean-square-of-error of the composite quantity, say μ_2, or the double thereof which has been called the *fluctuation*, should be take as a unit or parameter. Thus if there are n like constituents the fluctuation of each is of the order $1/n$. The mean deviation of each in absolute quantity is of the order $1/\sqrt{n}$. So is the first power of each taken at random; that is each of the items of which the sum forms the composite magnitude. Compare the use of the powers of k to serve as parameters for the co-efficients of the generalized law of error (*J.R.S.S.*, vol. lxix (1906), p. 498 *et passim*).

‡ The expression to be minimized may be written

$$\int_{-\infty}^{\infty} f \log f dx + h\left(\int_{-\infty}^{\infty} x^2 f dx - \tfrac{1}{2}c^2\right) + j\left(\int_{-\infty}^{\infty} f dx - 1\right);$$

where h and j are arbitrary multipliers. By the Calculus of variations there

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out almost every tract of Nature, the approximate fulfilment of the normal law of error.

III. There is yet another method of approach; one which approaches, indeed, but does not quite lead up to the theorem under consideration. This is an argument which proves not that the law of error *will* be set up and maintained in a molecular medley; but only that *if* it is set up, it will be maintained. This argument has been re-stated by the present writer only so far as may be necessary in order to bring out certain implications which underlie the received reasoning; namely the acceptance of propositions which rest upon the same sort of evidence as those above cited from Tait's article on the kinetic theory* of gases.

This third method may be introduced by a simple example: equal discs moving in a plane at random. One moving say with velocities U and V may be supposed to overtake the other moving with velocities u and v. The first belongs to a class defined by velocities of a certain (approximate) magnitude, *e.g.*, U between 500 and 501 metres per second, and V between similarly close limits. The contents of this class—and likewise that of any other class—will be maintained constant, and the distribution of velocities will therefore be stable, if the content lost to the class every second through collisions of one kind is just restored to the class every second through collisions of another kind. It is proved by well-known mathematical reasoning that this condition will be fulfilled if the normal distribution of velocities holds good. The kind of collision which reproduces the original velocities may be understood by supposing the velocities immediately after the collision above described, say U′, V′, and u', v', to be all reversed, and then looking at a diagram representing the encounter from the top of the page as if it were the bottom, with the usual convention that motion to the right is positive. The received reasoning thus summarised involves the assumption that a molecular medley presents the same appearance viewed from above, as from below: or more generally from any point of view.

In general the molecules having any degree of complexity, for the validity of the third method there is required the additional postu-

is a minimum when $\log f + hx^2 + 1 + j = 0$ $\left(\frac{1}{f}\right.$, the integral of which forms the second term of variation, being essentially positive). Utilising the two data we have

$$f \equiv \frac{1}{\sqrt{\pi}\, c}\, e^{-\frac{x^2}{c^2}}. \qquad \text{Q.E.D.}$$

* Above, p. 76.

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late that if a class is defined by the velocity-components of the centre of gravity and any number of other velocity-components, corresponding to so many degrees of freedom, the frequency-content of that class will be same as that of the class defined by the *same* velocities for the centre of gravity and the *same with signs reversed* for the other components.*

The postulates which have been made are based on the kind of Probability which has been variously called "intellectual,"† or "*a priori*,"‡ or unverified;§ and might perhaps be described as scientific common sense. It is used by the present writer to justify assumptions such as the following, that in the absence of specific evidence to the contrary the co-efficients with which we have to deal in concrete science are not often extreme values, and accordingly that the functions are not commonly discontinuous, the curves do not abound in singularities;‖ that when a variable magnitude is in the neighbourhood of a maximum (or minimum) the increment of that variable corresponding to a small finite increment of a variable on which it depends is likely to be particularly small.¶

The nature and need of such postulates are well illustrated by the objections which an acute thinker has brought against Laplace's conception of Probability. Arguing that the hypothesis of freewill is at least as intelligible and acceptable as the received determinism, Renouvier supposes an apparatus by which black and white balls continually pass in alternate order before a certain aperture; and it is arranged that whenever a certain spring is touched the ball then opposite the aperture will be shot out. If a person presses the spring

* *Phil. Mag., loc. cit.* p. 266. The proposition relates primarily to a *genus* characterized by (approximately) assigned (generalised) co-ordinates, and consequently to the *universe* which comprehends all the genera. The statement may with advantage be expressed in terms of the components of *momentum*.

† By Boole, "Laws of Thought," referred to in the article on Probability in the *Encyclopædia Britannica* (ed. 11) p. 378.

‡ By the present writer in the *Philosophical Magazine*, article on "A priori Probabilities," 188 and passages referred to in a subsequent note.

§ By Professor Pigou in *Wealth and Welfare*, p. 11.

‖ *Economic Journal*, vol. xvii (1907), p. 525 and p. 227, and passages to which reference is there made. *See also* vol. xxii (1912), p. 205.

¶ *Economic Journal*, vol. xviii (1908), p. 339. *Cp.* Marshall *Principles of Economics*, ed. 6, p. 409.

¶ The principle may be extended to *psychical* quantities, and is thus frequently employed by Professor Pigou; for instance, when he argues: "When "we have ascertained the effect of any cause on economic welfare we may, "unless, of course, we have evidence to the contrary, regard this effect as *probably* "equivalent in direction though not in magnitude to the effect on total welfare." —*Wealth and Welfare*, p. 11.

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from time to time at will without any aim or rule, it is very intelligible that black should come out about as often as white according to the law of Probabilities. But now suppose, instead of human agency, that the apparatus is connected with a second mechanism which, at times determined by some definite law, presses the spring and causes a ball to be ejected. Further, imagine a third mechanism which will modify the time-law (*les temps des déterminations*) of the second, a fourth mechanism controlling the third, and so on. "Would the variety and the divergence of the unknown causes "have the same effect as real indeterminateness (*leur indétermination* "*effective*)?" Perhaps so. But "What proof have we of this "tendency?" There is implied the hypothesis, "*Que les causes* "*variables de suites d'un certain évènement tendent à se balancer.*"*

The answer to Renouvier's query is that the proof of the required proposition is obtained from observation of similar cases. That a jumble of determinate mechanisms will result in the appearance of chance is a proposition which rests upon "the basis of a rough but "solid experience"; the sort of experience which Professor Pearson† has recognized as the "basis of Laplace's theory."‡ The

* *Essais Critiques*, vol. ii, p. 347, *et seq.* *Cp.* vol. i, p. 395. "Il ne sert "au partisan de la prédétermination q'une ressource, c'est de poser par "hypothèse un agencement des causes de certains évènements dits de hasard, "agencement tel que ces événements se distribuent suivant la même loi que "s'ils étaient vraiment fortuits."

† *Grammar of Science*, Ed. 3, ch. iv, p. 146.

‡ Some additional explanation seems called for by Professor Pearson's latest observations on Inverse Probability, which have appeared since the above was written. See the first part of his article on "The Fundamental Problem of Practical Statistics" in *Biometrika*, October, 1920. Apparently Professor Pearson does not withdraw the countenance which in an earlier writing (referred to in the preceding note) he had given to the doctrine upheld by the present writer (*Mind*, 1884), that the equal distribution of *a priori* probability (in the absence of specific knowledge) rests on a rough but solid basis of experience. Professor Pearson now seems to regard the doctrine, not indeed as untrue, but as unnecessary for the purposes of Inverse Probability. He asks: "Is it not possible that any continuous distribution of *a priori* chances "would lead equally well to the Bayes-Laplace result?" (*loc. cit.*, p. 4). It is possible to accept the affirmative answer to this question without rejecting what has been said above about the equal partition of *a priori* probabilities. For in making that assumption regard was had not so much to the reasoning by way of Inverse Probability as to a particular premiss employed by the classical writers. Their assumption of equal *a priori* probabilities served to justify our assumption of analogous equalities as congruous with and implied in the hypothesis of a molecular medley.

So far, however, as Inverse Probability has been employed in our version of the "H" theorem (above, p. 78), innovations which threaten the received method of the Calculus must be reckoned with. It is relevant to remark

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proof is of the kind which Dr. Venn has considered in his remarks on the apparently fortuitous sequence of digits in the constant "π." "The preponderance of analogy," he cautiously observes, "is rather "in favour of the existence of this characteristic of statistical "randomness in such successions of digits." "We should expect "rather than otherwise to find . . . that incommensurability "and resultant randomness of order in the digits was the rule and "commensurability the exception." The expectation raised by experience includes the probability of occasional exceptions. Very notable exceptions to the normal distribution of the digits in the seventh decimal place of logarithms were found by Mr. Nixon in the remarkable observations which he has recorded in this *Journal.** They might, indeed, have been predicted from the explanation given by Mr. Nixon. But were they predicted before the event? Perhaps even the decimals of "π" may have a surprise in store for some future mathematician who may continue the work of Mr. Sheepshank. Perhaps perfect randomness is not to be expected even in pure mathematics!

The examination of the foundations on which the third argument

that the question just now cited is generally to be answered in the affirmative; but not for the reason given by Professor Pearson. His reasoning seems to rest upon a very peculiar—not to say, hardly supposable—relation between the antecedent probability that a certain "possibility" (in Laplace's phrase) or constitution (*e.g.*, of a coin or die) would have existed, and the *a posteriori* probability that, if it existed, such and such events (*e.g.*, so many Heads or Aces in n trials) would be observed. But in general if the distribution of *a priori* chances is $\phi(x)\,\delta x/a$ (Pearson, *loc. cit.*), the function ϕ would not reappear in the expression for the *a posteriori* probability. And yet it is true that (almost) "any continuous distribution of *a priori* chances "would lead equally well to the Bayes-Laplace result." This for a reason that is indicated in the aforesaid article on the Philosophy of Chance, by reference to Cournot: "There is not required a precise *a priori* knowledge . . . Almost any *a priori* knowledge, as Cournot has well shown (*Théorie des Chances*, § 75, p. 169), is sufficient to deduce an overwhelmingly large, though not, of course, a numerically measured probability" (*Mind*, 1884, p. 229). The matter is particularly well stated by Mill (*Logic*, Book III., ch. xviii., § 6, especially par. 5). With reference to errors of observation, the principle has been explicitly restated by the present writer in an article on "*A priori* Probabilities" in the *Philosophical Magazine* for 1884. In the *Proceedings of the Society for Psychical Research* of the same year it is pointed out that "an accurate know-"ledge of the values under consideration (*a priori* chances) can often be dis-"pensed with, and (that) an inaccurate knowledge is often derivable from "experience." Compare *Journal of the Statistical Society*, vol. lxxi. (1908), p. 387; and article on Probability in the *Encyclopædia Britannica* (ed. 11), Section I, Art. 8; Section II, Art. 132. Professor Bowley has put the point very clearly in the new edition of his *Elements of Statistics* (p. 414, ed. 4).

* *Logic of Chance*, p. 112.

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rests appears to show that they are capable of supporting a greater weight than has been supposed. The argument is fitted to be a pillar of the molecular theory, not merely a buttress. It constitutes an independent proof of the normal distribution.* If the proof as compared with the first argument is somewhat less direct, yet it proves more. It determines the constants as well as the form of the required function. The relation of the first to the second argument is somewhat similar to that of the third to the second; which two might accordingly well change places. The second argument is less direct in so far as it makes a larger use of *inverse* probability. But it is applicable to a wider range of problems; for instance the case in which there are external forces acting on the system of molecules.†

Altogether, each of the proofs possesses an independent cogency. The consilience of all three conforms the conclusion that commonly and approximately the velocities of gas-molecules are distributed in conformity with the normal law of error.

Appendix.

A, referring to page 75.

The method placed first in the article above cited was chiefly employed to determine the form of the *function* representing the distribution of molecular velocities. The determination of the *constants* was too briefly treated (*Philosophical Magazine*, September 1920, p. 252 and p. 263). To complete the first method by determining the constants we may invoke the reasoning employed in the third method to determine the function as well as the constants (below, p. 87). Suppose that it has been proved by the first method that the distribution of velocities for one kind of molecules, of mass M, is given by the formula $Z \Delta Q_1, \Delta Q_2 \ldots\ldots\ldots$; where $Z = J \exp -(C_{11} \dot{Q}_1^2 + 2C_{12} \dot{Q}_1 \dot{Q}_2 + C_{22} \dot{Q}_2^2 + \ldots\ldots)$ (the symbol "exp" followed by any expression denoting the constant "e" raised to the power represented by that expression). Here $Q_1, \dot{Q}_2$ . . are the rates of increase (per unit of time) of Q_1, Q_2 generalized co-ordinates (such as the ϕ and ψ above defined, p. 73). Likewise let the distribution pertaining to a second kind of molecules (of mass m) be given by

$$z = \exp -(c_{11} \dot{q}_1^2 + 2c_{12} \dot{q}_1 \dot{q}_2 + c_{22} \dot{q}_2^2 + \ldots\ldots)$$

Then, by a generalization of the reasoning employed in the third argument (below, p. 85), it may be shown that $Zz \equiv Z'z'$, where

* *See* below, Appendix B. The point is too incidentally mentioned in the Paper on which the present article is based (*Philosophical Magazine*, vol. 40, p. 257, note).

† *See* below, Appendix C.

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Z', z' are what Z, z become when there are substituted for $\dot{Q}_1\ \dot{Q}_2\ \ldots\ \dot{q}_1\ \ldots$ the values to which they are respectively changed by a collision, viz., $\dot{Q}'_1$, $\dot{Q}'_2\ \ldots\ \dot{q}'_1\ \ldots$ Also the kinetic energy of the system consisting of two molecules is the the same, say T, before a collision as after, say T'. Now the energy of a molecule of the first kind $= A_{11}\dot{Q}_1^2 + 2A_{12}\dot{Q}_1\dot{Q}_2 + A_{22}\dot{Q}_2^3 + \ldots$; where the A's are in general functions of the co-ordinates. Thus in the example given above (p. 73) one of the terms of T is $\frac{1}{2}Ma^2\cos(\psi-\phi)\,\dot{\psi}\dot{\phi}$, where a is the length of each arm of the flail (ABC) and M is the mass of the two. And there are four others (out of nine) terms of T which have functions of θ for their coefficients. We have thus :—

$$C_{11}\dot{Q}_1^2 + 2C_{12}\dot{Q}_1\dot{Q}_2 + C_{22}\dot{Q}_2^2 + \ldots + c_{11}\dot{q}_1^2 + 2c_{12}\dot{q}_1\dot{q}_2 + \ldots$$
$$- C_{11}\dot{Q}'^2_1 - 2C_{12}\dot{Q}'_1\dot{Q}'_2 - C_{22}\dot{Q}'^2 - \quad - c_{11}\dot{q}'^2_1 - 2c_{12}\dot{q}'_1\dot{q}'_2 - \ldots$$
$$+ \lambda\,(A_{11}\dot{Q}_1^2 + 2A_{12}\dot{Q}_1Q_2 + \ldots + a_{11}\dot{q}_1^2 + 2a_{12}\dot{q}_1\dot{q}_2$$
$$- A_{11}\dot{Q}'^2_1 - 2A_{12}\dot{Q}'_1\dot{Q}'_2 - \ldots - a_{11}\dot{q}'^2_1 - 2a_{12}\dot{q}'_1\dot{q}'_2 - a_2\dot{q}'^2_2)$$
$= o$, true for all values of the Q's and $q's$ (λ being an arbitrary multiplier). The identity is therefore not destroyed by differentiation with respect to those variables. Accordingly, differentiating twice with respect to $\dot{Q}_1$, we have $C_{11} = \lambda A_{11}$. Differentiating once with respect to Q_1, and then with respect to $\dot{Q}_2$ we have $C_{12} = \lambda A_{12}$; and so on. Likewise $c_{11} = \lambda a_{11}$, $c_{12} = \lambda a_{12}$. . . . The constants J, j and λ are to be determined from the given number of molecules of each kind and the given (kinetic) energy in a unit of the medley. Higher mathematics are required when we go on from collisions to *encounters*, such as those described above (p. 74).

Otherwise we may complete the first method by the *second*, determining the *constants* in Z and z, so that Zz should be a *minimum* consistently with the given conditions (*cp.* below p. 89).

B, referring to page 84 above.

The adequacy of the third method, when reinforced by the Theory of Probabilities, to prove that the normal distribution of velocities is necessary, as well as sufficient, for stability may be made clear by considering a simple example. Let it be supposed that all the molecules are moving in one and the same line ; as described in the paper above cited (*Philosophical Magazine*, September, 1920, vol. 40, p. 249). Or is it easier to conceive several parallel tracks along which the molecules move this way and that, from time to time transferred at random from one track to another (say by numerous frictionless subways, or superways) ? Let the medley consist of two kinds of molecules of mass M and m respectively. Each kind is

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divided into *classes* defined by rate of velocity. Thus a class of the first kind is formed by molecules with velocity between U and U + Δ U. Another class is formed by molecules of the second kind with velocity between u and $u + \Delta u$. Here U and u are primarily related to the centre of gravity of the system supposed at rest. But if that centre is moving at a uniform rate of velocity, say v; with respect to some fixed point it is proper to substitute in what follows for U and u, U − v and $u - v$ (U and u now related to the fixed point). Let the number of molecules in any class, per unit of space-length of line or road of many tracks, be F (U) Δ U. Here the unit of length is to be taken so large as to comprise numerous specimens of all (or all but the rarest) rates of velocity. The expression $f(u)\,\Delta u$ is similarly related to the second kind of molecule. It is required to determine the function F and f so that the distribution of velocities throughout (any unit of) the medley should remain constant.

Observing the medley at any moment let us fix attention on the couples which here and there within the vast unit are formed by two molecules of different kinds in close proximity. Let closeness be defined by the condition that *either* the two neighbours *will* collide during the period Δt *after* the date of observation, or *have collided* during the period Δt *before* that date. The category of neighbours will thus be divided into two sections in one of which the neighbours are drawing together, while in the other section the distance between them is increasing. Let U be positive and greater than u, which, to further fix the ideas, may be also supposed positive. Then the first section may be represented by the symbol (U ; u) ; the second section by (u ; U). The initial content of each section, that is the number of molecules belonging to each section throughout a unit of space at the date of observation, is the same ; namely

$$\Delta t\,(\mathrm{U} - u)\,\mathrm{F}(\mathrm{U})\,f(u)\,\Delta\,\mathrm{U}\,\Delta\,u.$$

The molecules forming the initial content of each section pass out of that section during the period Δt after the initial date. The molecules initially belonging to the secton (U, u) all during the period Δt pass out of that section by receiving through collision new velocities, say between U′ and U′ + Δ U′, u' and $u' + \Delta u'$ respectively. Thus they belong to the section (U′ ; u') at the end of the period Δt. Meanwhile the molecules forming the initial content of (U′ ; u') have passed out of that section, u' being greater than U′. Thus the final content of section (U′ ; u') is the same as the initial content of section (U ; u). But by hypothesis the content not only of every *class*, but also of every *category* and *section* thereof, remains constant. That follows from the presumptions well stated by Tait in a passage above (p. 76) quoted. Accordingly the initial content of

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$(U ; u)$ just now written is equal to the initial (and permanent) content of $(U'; u')$, and that of $(u' ; U')$; namely

$$\Delta t\,(u' - U')\,F(U')\,f(u')\,\Delta U'\,\Delta u'.$$

In the equation thus presented the $(U - u)$ on one side is equal to the $(u' - U')$ on the other side. Also $\Delta\ U\ \Delta\ u = \Delta\ U'\ \Delta\ u'$ (*op. cit.* pp. 257, 267). Accordingly

$$F(U)\,f(u) \equiv F(U)\,f(u).$$

And this condition is supplemented by the equation (furnished by the conservation of energy) $MU^2 + mu^2 = MU'^2 + mu'^2$. The solution of the *functional equation* thus presented is well known (*op. cit.* p. 257, and reference). It leads to the conclusion that $F(U) = Je^{-\lambda U^2}$; $f(u) = je^{-\lambda u^2}$; where the three constants J j and λ are to be determined as before (above, p. 85); given the numbers of each kind in a unit and the energy of the system.

A further application of Probabilities is required when we proceed to motion in two or more dimensions. We should now subdivide *categories* as above defined into *varieties* (*op. cit.* p. 260) distinguished by the mutual orientation of the neighbouring molecules. Thus, if the system consists of two kinds of disk, of mass M and m respectively, each category characterized by assigned values of the velocities U, V and u, v may be subdivided into cases according to the position of the point of impact. Let us regard as forming a separate variety all the cases of the assigned category for which (the velocities, and accordingly the line of relative motion, being assigned) the point of impact occurs within an assigned second or other small interval on the circumference of either circle (supposed not to rotate). The frequency-content of the varieties thus defined will not be the same for all; but, whatever it is for each, it will be maintained permanently. It cannot be supposed unstable, while the distribution of the velocities without regard to position in space is stable. One might as well suppose that the chance of tossing doublets at backgammon varied with the player's place at the table; or that the sporadic distribution of the drops in a steady rain-fall was not the same for a small as for a large rain-gauge. This is not the place to exhibit the mathematical reasoning which is based on this principle of Probability.

C, referring to p. 84.

The superior potency of the method placed second in the article above cited becomes apparent when we go on to the case of external forces acting on the system of molecules. Suppose, for instance, that the line, or straight road with several tracks, described above (p. 85) is not level, but inclined to the horizontal at an angle θ.

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There is then a force $g \cos \theta$ acting on each molecule. By the first and third methods we can infer that the *mean* kinetic energy at each height is proportional to exp. $-h(MU^2 + mu^2)$; it being evident, in view of the continuous exchange of velocity between adjacent tracts that a uniform ultimate average velocity for each kind of molecule will be set up. It follows, by preceding theorems, that the distributions of velocity are of the form

$$Z = \Psi(x)\ J \exp - hMU^2$$
$$z = \psi(x)\ j \exp - hmu^2;$$

where x is the distance of any small tract of length Δx from the lower barrier of the medley. The form of Ψ and ψ can be ascertained by the reasoning which is commonly employed to find the density and pressure in a column of gas at uniform temperature. But with less aid from Hydrostatics, from the sole datum that the total energy is constant, the second method which is based on the "H" theorem evolves the complete formula.

It will be sufficient to consider the simplest and most important case, in which the molecules are moving in a *vertical* line when they collide. They may be supposed to be transferred at random from one point to another on a vertical tube or tubes by means of certain branching side-tubes; without friction, but not without alteration of potential and kinetic energy. The upper extremity of each vertical tube is open; the distance from the base being treated, without sensible error, as infinite. The base of the tube is perfectly elastic.

Let the molecules of mass M be distributed so that the frequency of any class U (above, p. 80) at the height X above the base is

$$N \phi(X, U)\ \Delta X\ \Delta U;$$

where N is the number of such molecules in the medley. Likewise let the distribution for the molecules of mass m be $n\psi(x, u)\ \Delta x\ \Delta u$; a different type ("lower case") being used for the symbol representing height in accordance with the *independence* of the two distributions. We have then

$$(1) \int_0^\infty dX \int_{-\infty}^\infty dU\, \phi(X, U) = 1;$$

$$(2) \int_0^\infty dx \int_{-\infty}^\infty du\, \psi(x, u) = 1;$$

whence $(3) \int_0^\infty dx \int_{-\infty}^\infty dU \int_0^\infty dx \int_{-\infty}^\infty du\, \phi\psi = 1$

Let $\int_0^\infty dx \int_{-\infty}^\infty dU\, (2mgX + MU^2)\, \phi(X, U)$—twice the average total (kinetic + potential) energy for molecules of mass $M = 2[E_1]$;

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let the corresponding average for the second kind of molecule = $2[E_2]$, and let $[E_1] + [E_2] = [E]$. Then

$$(4)\int_0^\infty dX \int_{-\infty} dU \int_0^\infty dx \int_{-\infty}^\infty du\,(2\,gMX + MU^2 + 2gmx + mu^2)\,\phi\psi = 2[E].$$

Put $f = N\phi \cdot n\psi$. The most probable form of f is, according to the "H" theorem (*Phil. Mag., loc. cit.*, p. 255) that for which $\Sigma f \log f$ —the summation extending over all possible values of f—is a *minimum* consistent with the conditions which the function f must fulfil. Those conditions are given by multiplying both sides of equation (3) and likewise those of equation (4), by Nn. The first condition may be written

$$\kappa\left(\int_0^\infty dX \int_{-\infty}^\infty dU \int_0^\infty dx \int_{-\infty}^\infty du f - Nn\right) = 0,$$

where κ is an arbitrary multiplier. The multiplier λ may be similarly employed to express the second condition. We have accordingly to minimise

$$\int_0^\infty dX \int_{-\infty} dU \int_0^\infty dx \int_{-\infty}^\infty du \Big\{ f \log f + \kappa f + \lambda\,(2gMX + MU^2 + 2\,gmx + mu^2)\,f \Big\} - \kappa Nn - \lambda Nn 2[E].$$

Whence $\log f = \text{constant} - \lambda\,(2gMx + MU^2 + 2gmx + mu^2)$.

Put Cc for the constant, and we have

(5) $f = C \exp. - \lambda\,(2gMX + MU^2).\, c \exp. - \lambda\,(2gmx + mu^2)$.

Whence, λ being evidently positive, we obtain by (3) together with (1) and (2).

$$(6)\quad C = N 2g\lambda M \sqrt{\lambda M} / \sqrt{\pi}$$
$$c = n 2g\lambda m \sqrt{\lambda m} / \sqrt{\pi}$$

Substituting (6) in (5), and utilizing (1), we obtain by integration with respect to all four variables

$$\frac{1}{\lambda} + \tfrac{1}{2}\frac{1}{\lambda} + \frac{1}{\lambda} + \tfrac{1}{2}\frac{1}{\lambda} = 2[E];\quad \lambda = \tfrac{3}{2}\frac{1}{[E]}$$

Substituting the values of the constants which have been found in (5) we obtain

$$Nn\,\phi(X,U)\,\psi(x,u) \equiv Nn\left\{2g\left(\frac{3}{2}\frac{M}{[E]}\right)^{\frac{3}{2}} exp - \frac{3}{2}\frac{I}{[E]}(2gMX + MU^2)\right\} \left\{2g\left(\frac{3}{2}\frac{m}{[E]}\right)^{\frac{3}{2}} exp - \frac{3}{2}\frac{I}{[E]}(2gmx + mu^2)\right\}$$

The expressions within curled brackets on the right are respectively identified with the required functions ϕ and ψ.

It is certainly remarkable that positive knowledge about physical phenomena can thus be elicited from the pure theory of Statistics.

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The Incidence of Mortality Upon the Rich and Poor Districts of Paris and London.

By T. H. C. Stevenson, C.B.E., M.D.

An article by M. L. Hersch, Professor of Statistics at the University of Geneva, recently published in the *Revue d'Economie politique* (Nos. 3 and 4, 1920), and entitled "Inequality before "Death," compares the mortality of the twenty arrondissements of the city of Paris in relation to their wealth. Wealth is measured by the proportion of households taxed under the "contribution per- "sonnelle-mobilière," as published in the Paris *Annuaire Statistique* for 1911–13, the period for which the comparisons of mortality are made. These proportions were found to vary from 60·4 per cent. in the Elysée to 10 per cent. in Ménilmontant. The arrondissements were divided into four groups, the first including three with over 45 per cent. of households taxed; the second, four with 30–45 per cent.; the third, ten with 15–30 per cent. taxed; and the fourth and poorest, three, with under 15 per cent. These are characterized as "wealthy," "well-to-do" (aisés), "poor," and "miserable" respectively.

The mortalities dealt with are (1) the general death-rate from all causes; (2) infant mortality, total, legitimate and illegitimate; and (3) tuberculosis mortality. In every case the excess of the mortality of the poorer districts is so immensely greater than that met with in London that it has seemed worth while to work out the corresponding rates for the metropolitan boroughs for the same three years and to make the same comparisons for them. London statistics provide no such direct gauge of wealth as the Paris taxation returns, but various measures have from time to time been employed for the purpose. On this occasion the measure used was the proportion of domestic servants (excluding those in hotels) to total population at the 1911 census. The same grouping was used as in the Influenza Supplement to the Report of the Registrar-General for 1918, where, by the way, it was shown that Dives and Lazarus were equal before death from influenza in the great epidemic. (It would be interesting to find whether this observation applies also to Paris, where the general advantage of the richer districts is so much greater than in London.) By this means the following table divides the 29 metropolitan boroughs into four groups—the first, of six, varying between

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Mortality of London Boroughs grouped by Wealth.

	Domestic servants (both sexes) per cent. of population (1911).	Death-rate from all causes, 1911–13.		Infant mortality.			Death-rate from tuberculosis, 1911–13.	
				1918–19.		1911–13.		
		Crude.	Standardized.	Legitimate.	Illegitimate.	Total.	Crude.	Standardized.
Kensington	16·67	13·7	13·6	83	221	112	1·32	1·32
Hampstead	16·40	10·4	11·0	64	236	72	0·81	0·80
Westminster	15·17	12·6	13·3	77	235	94	1·49	1·42
Chelsea	14·96	14·7	14·0	78	155	91	1·64	1·61
Marylebone	12·98	14·3	14·6	79	250	98	1·70	1·66
Paddington	10·42	13·3	13·2	88	237	109	1·33	1·31
Group I	14·38	13·2	13·4	80	228	100	1·39	1·36
City	6·46	14·0	14·6	122	278	97	1·95	1·84
Lewisham	5·71	11·3	11·1	51	294	84	1·09	1·01
Wandsworth	5·67	11·5	11·6	72	240	96	1·20	1·18
Stoke Newington....	4·98	13·0	12·4	71	231	85	1·30	1·28
Holborn	4·38	15·1	15·2	99	267	102	2·30	2·17
Greenwich	4·10	13·9	13·7	93	349	102	1·60	1·59
Group II	5·34	12·2	12·1	73	272	94	1·32	1·30
Fulham	3·52	13·6	14·1	85	222	105	1·73	1·69
Hammersmith	3·30	14·5	14·3	91	207	114	1·62	1·58
Lambeth	3·18	14·3	14·0	82	217	105	1·71	1·68
St. Pancras	3·12	15·1	15·1	81	226	98	1·91	1·85
Hackney	2·95	13·5	13·6	83	355	100	1·68	1·67
Woolwich	2·81	12·6	12·9	88	220	84	1·67	1·65
Camberwell	2·68	13·8	13·6	83	268	99	1·61	1·60
Deptford	2·64	15·0	14·8	87	176	117	1·73	1·70
Battersea	2·62	13·6	13·7	74	276	107	1·56	1·53
Islington	2·48	14·9	14·5	88	258	107	1·69	1·66
Group III	2·90	14·1	14·0	84	243	103	1·70	1·67
Stepney	1·33	15·8	16·5	90	314	121	2·15	2·12
Finsbury	1·24	18·6	18·4	91	229	137	2·47	2·45
Southwark ...	1·23	17·5	17·6	101	225	122	2·23	2·17
Poplar	1·18	17·2	17·0	92	216	125	1·88	1·86
Bermondsey	0·97	17·8	17·8	105	360	133	2·35	2·31
Shoreditch	0·91	18·9	19·5	124	255	150	2·47	2·46
Bethnal Green	0·77	16·4	17·1	101	263	123	2·21	2·21
Group IV	1·13	17·1	17·4	99	260	128	2·21	2·18
County of London	4·74	14·4	14·4	86	247	109	1·71	1·68

16·7 per cent. of servants in Kensington and 10·4 in Paddington; the second, of six, between 6·5 in the city and 4·1 in Greenwich; the third, of ten, between 3·5 in Fulham and 2·5 in Islington; and

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the fourth, of seven, between 1·3 in Stepney and 0·8 in Bethnal Green. There can be little doubt that this grouping is on the whole satisfactory; but if it be suggested that the mortality contrasts between the London are less than those between the Paris groups because the former do not so precisely distinguish rich from poor as the latter, the reply must be that the difference in contrast between the group mortalities in the two cities is many times too great to be accounted for in this way; and that in any case the differences in contrast between the individual districts of highest and lowest mortality remain, and are entirely independent of the measure of wealth used.

General Mortality.—The Paris rates vary between 9·6 in the Elysée, the richest arrondissement, and 24·6 in the Gobelins, which is the poorest but two. The rates for the four groups are 11·0, 13·0, 16·9 and 22·4 respectively. Compared with these the London contrasts are much smaller. Here the lowest rate, 10·4, is furnished by Hampstead, the richest borough but one, while the highest rate, 18·9, is furnished by Shoreditch, which figures as the poorest borough but one. But the Hampstead rate is higher than that of the Elysée, and the Shoreditch rate is much lower than that of the Gobelins arrondissement. In Paris the excess for highest over lowest amounts to 156 per cent., in London only to 82. And the group rates for London are 13·2, 12·2, 14·1 and 17·1. These bear an altogether different aspect from the Parisian figures. Whereas the latter increase so regularly with poverty that the highest rate for any district in one group never exceeds the lowest for any district in the next poorer group, in London the gradation even for the groups themselves is irregular, the lowest death-rate not being returned for the richest group. Indeed, the difference between the first three London groups is slight, significant excess only being apparent for the poorest group. And whereas the excess of mortality of the poorest over the richest group in Paris is 104 per cent., in London it is only 30 per cent.

So great a contrast between the experiences of the two capitals at once suggests the possibility of some difference in method of construction of the two sets of mortalities. The London rates, from 1911 on, have referred to the inhabitants of the several boroughs, in whatever part of England and Wales death might happen to occur. This does not appear to be the case in Paris. The deaths, indeed, are deaths of persons ordinarily domiciled in each arrondissement, not deaths occurring therein, and to this extent correspond with the London figures, but whereas all deaths of persons domiciled outside Paris are excluded (*Annuaire Statistique* for 1913,

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p. 128) there is no evidence of any inclusion of deaths of Parisians occurring outside Paris. In 1913, out of a total of 50,287 deaths registered 5,663 were excluded as of non-Parisians, and it is upon the balance of 44,624 that the rates quoted are based. As some indication of the probable number of deaths of Parisians ignored by such tabulation the experience of London in 1919 may be quoted. The number of deaths registered in London of persons resident elsewhere was 5,245—rather less than in Paris, and considerably less in proportion to total deaths. Deaths of Londoners outside London numbered 3,798, all but 941 of which occurred in the outer ring, and 2,309 of them in London institutions therein. If the Paris proportions are similar there may be some 4,000 deaths of Parisians to add to the 44,624 tabulated in 1913, or say, 9 per cent. annually. Such a number, if very unequally distributed over the various quarters, might have a quite perceptible effect upon their death-rates, but this could not account to more than a small extent for the great contrast between the London and the Paris experience. And indeed it may be assumed that in London, where most of the "inward transfers" are from institutions, such as asylums and fever hospitals, situated outside the county boundary, the exclusion of these deaths would reduce the mortality of the poorer more than of the richer boroughs. But the other Londoners who die outside the county may be largely members of the wealthier classes, absent on business or because of illness, so it seems hard to decide how the exclusion of these deaths would affect the excess of mortality in the poorer boroughs. Probably its effect would not be great, and on the whole this conclusion seems likely to apply also to Paris.[1]

It seems therefore that the remarkable contrast in experience between the two cities cannot be explained, except possibly in a very minor degree, by any differences of method in compilation of the statistics compared.

Infant Mortality.—The conclusion just arrived at applies still more to infant than to total mortality, for in its case the contrast between rich and poor quarters of Paris assumes dimensions which in the light of London experience seem quite fantastic. Total infant mortality in Paris varies as tabled for the three years from

[1] There may be fewer deaths in Parisian than in London institutions situated outside the city limits. For whereas a note is appended to tables for those portions of the Department of the Seine outside Paris that deaths of persons resident outside Paris but dying therein have been referred to the commune in which they lived, no similar transfer in the other direction is referred to. It may be, therefore, that the numbers of Parisians dying in other parts of the Department of the Seine have been considered too small to call for such treatment.

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45 per 1,000 live-births in the richest area, Elysée, to 163 in the poorest, Ménilmontant. The rates for the four groups are 51, 69, 107 and 151 respectively. Hence Professor Hersch draws the conclusion that "in the miserable arrondissements only one-third of "this mortality should be attributed to the effect of naturally "inevitable causes: the other two-thirds are massacred by existing "social inequalities." In London the rates vary from 72 in Hampstead to 150 in Shoreditch, and the rates for the four groups are respectively 100, 94, 103 and 128. As with the general death-rate the lowest is not so low, and the highest not so high, as in Paris: and instead of an excess of 200 per cent. for the poorest group over the richest we have one of only 28 per cent. Further, and again as with total mortality, the rate for the second group in London is lower than that for the first,[1] and the only really significant difference shown is between the poorest group and the others.

In comparisons of infant mortality a difference in registration practice between the two countries, which has not been referred to in dealing with total mortality, because of little importance in that connection, becomes a serious factor. In France, as in some other Latin countries, live-born children who die before registration are registered as still-born. Registration is compulsory within three days of birth, so under strict enforcement of the law the deaths lost to infant mortality could not exceed those of the first three days of life, and would necessarily in practice be fewer. A fair deduction might be that of the first two days' deaths, assuming registration actually within three days. Deaths under one day in London amount in recent experience (1918–19) to 11·1 per 1,000 births. Those on the second day are not separately tabulated here, but in the registration United States, where this is done, they amounted in 1918 to 33 per cent. of those on the first day. In this way the London mortality for the first two days may be estimated at 14·75, which on the above assumption should be deducted from the London rate in comparing it with that for Paris. It may, moreover, be deducted in all cases alike, for comparison of the London boroughs shows that this mortality is independent of wealth. Thus in 1918–19, the two years for which the Registrar-General has tabulated the

[1] It seems likely that the reason of this may be that all the boroughs in the richest group, except Hampstead, are centrally situated, whereas those of the second group for the most part are of a more suburban character. Hampstead, which happens to be both rich and suburban, furnishes all the lowest death-rates in our comparison of London boroughs. In Paris, on the other hand, position seems to have little influence. Only one out of the three arrondissements of the first group adjoins the periphery, but all those of the fourth group, with their exceedingly high death-rates, do so.

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figures, the fourth group (poorest boroughs) compares as follows with the County of London ;—

	Under 1 day.	1–7 days.
Group 4	10·96	11·30
London	11·08	11·39

But deduction of 14·75 from the infant mortality of Hampstead reduces it only to 57, which is still considerably in excess of the 45 rate returned by the Elysée.

Some check upon the adequacy of the correction should be obtainable from the still-birth returns, since the registration procedure which diminishes infant mortality necessarily increases still-births to a corresponding extent. Addition of the deaths of the first two days to the London still-birth-rate, of about 3 per cent. of births notified,[1] would raise it to about 4·5 per cent. But the Paris rate, as quoted by Professor Hersch for 1911–13, is 8·7 per cent., the rates for his four groups being 8·2, 7·0, 8·8 and 9·8 respectively.

We are thus faced by a large discrepancy the cause of which cannot be determined from the data available. It may be that genuine still-births are much more frequent in Paris, or that notification of them in London is very incomplete, or that far more live-births are registered in Paris as still-births than the registration law would suggest. But whatever the cause may be, it is difficult to see how it can greatly modify the contrast between the wide divergence of the mortality experience of the Parisian, and the comparative uniformity of that of the London groups. If we deal *en masse* with the mortality under one year of age of viable children, whether death has occurred before or after birth, by adding still-births to deaths under one year of age, the rates for the four groups of Parisian districts become 133, 139, 195 and 249 per thousand live-births respectively, and those for the London groups 130, 124, 133 and 158.[2] These figures still show very slight variation of mortality in London compared with that experienced in Paris, and appreciable excess only for the poorest areas. It is possible that the Parisian contrast may be increased by the exclusion of deaths of Parisian infants occurring outside Paris. If, for instance, unhealthy infants are sent out to nurse in the country on any considerable scale, their

[1] 2·6 for 1918, but this rate is admittedly too low. The rate for England and Wales, based on returns received, was 3 per cent.

[2] Taking the London still-birth-rate uniformly at 3 per cent. According to the 1918 returns it was 3·7, 2·4, 2·6 and 2·4 for the four groups ; but the excess for the first was entirely due to the lying-in hospital in Marylebone. Excluding Marylebone, the rate for the first group was 2·5.

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deaths there may mainly affect the figures for the richer districts: but it seems unlikely that any such cause could go far to explain the differences shown.

Professor Hersch also compares the mortality of legitimate and of illegitimate infants by class of area in Paris. For the legitimate, mortality, in his table, varies from a minimum of 31 in the richest area to a maximum of 152 in the poorest, the rates for the four groups being 45, 62, 95 and 141 respectively. In London the lowest rate (for the years 1918–19 in this case, those for 1911–13 not being conveniently available) was 51, in Lewisham, which belongs to the second group, and the highest, 124 in Shoreditch, the poorest borough but one. The rates for the four groups were 80, 73, 84, 99.

For the illegitimate, mortality in Paris varied between 60, in Passy, the second richest district, and 276 in the Observatoire arrondissement, which is included in the third group. The group rates were 73, 93, 147 and 182 respectively. In London the lowest rate, 155, was returned (on a basis of 27 deaths only) by Chelsea, and the highest, 360, by Bermondsey, the rates for the four groups being 228, 272, 243 and 260. In this case it will be seen that all appearance of gradation by poverty of the London areas disappears, the highest rate being returned by the second group, which records the lowest legitimate mortality in 1918–19 and the lowest total mortality in 1911–13. Yet in Paris the excess for the poorest over the richest group is 149 per cent.

It may be noticed in passing that excess of illegitimate over legitimate mortality is very much greater in London than in Paris. For Paris in 1911–13 these rates were respectively 141 and 96, whereas for London in 1918–19 they were 247 and 86 (and in 1911–13 231 and 104).

Mortality from Tuberculosis.—Under this heading the most remarkable contrasts of all between the experiences of the two capitals is met with. Even as incompletely stated in the official returns the tubercle mortality of Paris is more than twice that of London—3·94 per 100,000 as against 1·71 in 1911–13, or an excess of 130 per cent., the London being only 43 per cent. of the Paris rate. And yet at the upper end of the scale of wealth mortality in the two cities is almost equal. It is the formidable increase of tubercle with poverty in Paris, as against a comparatively trifling increase with poverty in London, which causes this great difference.

The rates in Paris vary from 1·08 in the richest district, Elysée, to 6·36 in the poorest, Ménilmontant. The rates for the four groups are 1·48, 2·68, 4·31 and 5·86 respectively. In London the rates

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vary from ·81 in Hampstead to 2·47 in Finsbury and Shoreditch, the group rates being 1·39, 1·32, 1·70 and 2·21 respectively. Thus while the rate for the poorest district is six times as great as that for the richest in Paris, it is only three times as great in London; and while the poorest group suffers four times as much as the richest in Paris it suffers only 1·59 times as much in London. Moreover, while the Paris gradation by poverty is so steep and so regular that the lowest rate returned by any district in a poorer group is always in excess of the highest rate returned by any district in the next richer group, the London gradation is not regular even for the groups themselves, the second group, as in other cases, returning a lower rate than the first. (No other borough in the first group returned a rate approaching that of Hampstead, the next lowest, that for Kensington, being 1·32.)

Another point brought out by Professor Hersch is that the proportion of total deaths in Paris due to tubercle rises steeply with increasing poverty. For the whole city it is 23·9 per cent., and for the four groups 13·4, 20·6, 25·5, and 26·2 respectively. The corresponding proportions for London are 11·9 for the whole population (barely half the Paris proportion), and 10·5, 10·8, 12·0 and 12·9 for the four groups.

So far the mortalities compared, from tubercle as well as from all causes, have been crude rates in both cases. No others are available for Paris, but the effect of standardization on the London rates is shown in the table. As this is in all cases slight, it has been uniformly disregarded.

The tubercle mortalities furnish Professor Hersch with the material for the most striking observation in his paper. Taking as the test of poverty in a household its escape from payment of the "contribution personnelle-mobilière," he finds the proportion of poor in his four groups of areas to be 45·9, 64·1, 79·0 and 89·6 per cent. respectively, and 74·2 for Paris as a whole, there being thus twice as large a proportion of poor in Group 4 as in Group 1. But the tubercle death-rate is four times as high in Group 4 as in Group 1, and he therefore asks himself whether it varies directly as the square of the poverty fraction. Taking the Paris death-rate as unity, the rates for the four groups and the whole city are as follows:—0·38, 0·68, 1·09, 1·49, 1·00. If the hypothesis is correct the square roots of these ratios should approximate to the corresponding poverty ratios, which are 0·62, 0·86, 1·06, 1·21, 1·00. The square roots are 0·62, 0·82, 1·04, 1·22, 1·00. This is a remarkable approximation, and it is perhaps not surprising that its discoverer believes he has found a natural law expressing the quantitative

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relationship of tubercle mortality to poverty, the more so as it survives the test of application to the individual arrondissements in a striking manner. The mean difference between the observed proportions of poor households and the proportions as calculated from the square roots of the tubercle mortalities is less than 4 per cent.

Assuming the universality of this relationship, Professor Hersch proceeds to draw certain deductions, of which the first is that (1) the ratio of the tubercle death-rate to the square of the poverty fraction of the population $\left(\frac{t}{p^2}\right.$ in his notation$\left.\right)$ is constant, and so characteristic, for any locality. He names this ratio the tubercle characteristic, and denoting it as c, then $c = \frac{t}{p^2}$ whence it follows that (2) where all the population are below the poverty line (*i.e.*, $p = 1$) $c = t$. As c for Paris is ·007 he concludes that if all Parisians were below his poverty line their death-rate from tubercle would be 7 instead of 3·94 per 1,000. Thus he believes that by comparing the tubercle characteristics of various places he has a means of determining the degree in which they are favourable or refractory to tubercle, whatever their wealth.

And again (3), if there were no poor there would be no tubercle mortality. For as $c = \frac{t}{p^2}$, $t = c\,p^2$, *i.e.*, $t = c \times o$ where $p = o$, so $t = o$ in this case.

From the above it seems evident that the laws deduced can only apply to the particular standard of poverty made use of in this case. It might be possible, for instance, to take some other dividing line between poor and not poor, which would show the poor in the fourth group of areas to be four times as numerous as in the first, instead of only twice, and in that case the Paris mortality would vary more or less in proportion to the poverty fraction itself and not to its square. Everything seems to depend on the standard of poverty taken. If, for instance, one took 200*l.* per annum per family as the standard, the poor areas might have a poverty fraction of say ·5 (50 per cent. below the poverty line), and the rich of ·2. If 300*l.* were taken as standard, the poverty fraction of the poor areas might rise to ·8 and that of the rich to ·4. In the former case the square of the poverty fraction is 6¼ times as great for the rich as for the poor areas (·25 : ·04), but in the latter only four times (·64 : ·16). If, as in Paris, tubercle mortality were four times as great in the rich as in the poor areas, the law would apply under the higher but not under the lower standard.

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Again, if we appeal to the experience of London we see that the law deduced from Parisian experience cannot possibly apply to it. For whereas in Paris the poorest areas suffer four times as high a mortality as the richest, in London they only suffer 1·59 times as much. So if the law applied, the proportion of poor in the fourth London group should be only $\sqrt{1\cdot59}$, or 1·26 times as great as the first group, whereas in Paris it is twice as great. It is inconceivable that this should be so. Social critics frequently call attention to the extreme contrasts between the rich and poor quarters of London, and it must be obvious to all that any reasonable standard of poverty will show a far greater excess in the London Group 4 over Group 1 than 1·26 : 1. Professor Hersch proposes to study the application of his law to other great European towns as well as Paris, and it will be interesting to see what view he takes of the London data.

For the writer the chief interest in his paper has been the way in which it brings out the extraordinary range of mortality in the various districts of Paris as contrasted with its comparative uniformity in London.

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REVIEWS OF STATISTICAL AND ECONOMIC BOOKS.

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1.—*La Misura Della Vita.* By Alfredo Niceforo. xii + 515 pp. Torino : Fratelli Bocca. Price 22 lire.

This treatise is an essay in the application of statistical method to regions which have "never or rarely been explored by the "statistician."

The author's claim to originality in the choice of subject is perhaps excessive, but we have not seen such a catholic collection of examples between one pair of covers before. The nature of a frequency distribution, for instance, and the meaning of the mode, are illustrated by distributions of Martial's Epigrams and Horace's Odes according to the number of verses, and of minor planets between Mars and Jupiter according to the distance from the sun, of finger prints, of heights of Greek and Roman statues, of taxes paid by Lombards in the Saint Germain quarters of Paris in 1292, and of many other characters. Equally varied are the examples employed to illustrate the "secondary characteristics" of a frequency distribution—the mean, the median, quartiles, &c. A long chapter on variability describes in the text and in footnotes the meaning of a standard deviation and of skewness. An interesting example in this chapter is that of a memory test applied to two classes of boys similar in numbers, ages and school standing. The same story was read out to both classes, to the first as an entertainment during a period of leisure, to the second as a task on which they were to be examined. Both classes were tested as to the common nouns occurring in the story. The "pleasure" memory differed from the "task" memory in having a smaller mode and a greater skewness. There was also a slightly greater dispersion (6·25 as against 6·10), but the difference was too small to have any definite significance.

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A chapter on trends of social phenomena with time and a further collection of illustrations of variability conclude the first part. Part II deals in an elementary way with probability, binomial distributions and the normal law, some probable errors and various methods of measuring association and correlation. Here again the illustrations are of the most varied character, ranging from the association between sunspots and magnetic declinations to the productivity of the various schools of painting in Europe at various periods, and to the epithets applied to women by Homer. The theoretical and technical parts of the book are too discursive and unsystematic to make it suitable for a student's first reading, but the wealth of illustrations will make it a very interesting accompaniment to a text-book like Yule's or Mortara's. Anyone who has to lecture on statistical theory will find Niceforo a rich quarry for illustrative material. L.I.

2.—*Report from the Select Committee on Increase of Wealth (War); with Proceedings, Minutes and Appendices.* House of Commons Paper, 1920, No. 102. xviii + 304 pp. Price 3*s*.

Why the House of Commons allows the Stationery Office to affix absurd titles like "Increase of Wealth (War)" to its Committee's reports is a mystery of many years standing. Its own phrase was a "Tax upon War-time Increases of Wealth," which is both English and intelligible. The Committee was to inquire into the proposal to impose such a tax and to report whether it was "practicable, and if so, what form it should take." This being the reference, it seems unjust to censure the Committee, as some critics have done, for leaving to the House the decision whether a tax of this description "is desirable or expedient as an alternative to "Excess Profits Duty or to the taxation of profits in any other "form." Mr. Pennefather declined to vote, and Mr. Macquisten voted No, but the other members all agreed "that although the "administration of a tax of this character would involve many "difficulties, yet those difficulties should not be insurmountable, "and in its main features the scheme of the Board of Inland "Revenue, as now amended, is practicable in an administrative "sense, inasmuch as (*a*) the examination of taxpayers' returns, "valuation of property, and assessment and collection of duty could "be carried out in an impartial and effective manner; (*b*) the cost "of administration and collection, having regard to the estimated "yield, would be small. On the other hand, the duty of the taxpayer to furnish a return of his wealth at the two dates, and a "statement of its value would involve him in both trouble and "expense. The effect of the large abatements now proposed is that "the burden of taxation would, in the main, be cast only on those "individuals who could most justly be called upon to make the "sacrifice, and that the tax would discriminate against those who "had made exceptional profits in consequence of the war conditions." These words scarcely bear out the impression obtained

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by the public from the newspapers that the Committee condemned the proposal or even damned it with faint praise. Which of our numerous direct taxes, if considered as a new proposal, would be likely to obtain from a committee of taxpaying Members of Parliament a more enthusiastic approval than this? Death-duties, income-tax, or E.P.D.?

The evidence leaves a somewhat confused impression on the mind of the reader. The test to apply to taxation is whether it is economical in the sense of doing less economic damage in the long run than any other method of raising money, and whether it is equitable in the sense of outraging existing ideas of justice either not at all or at least no more than any other method. If it is both the most economical and the most equitable method, all is well, but if economy and equity conflict, what then? The most promising suggestion is that the conflict will generally, if not always, be found to be rather unreal, inasmuch as what is regarded as very unjust will seldom be found economical, and what is economical will in the end come to be regarded as just.

From the side of economy it was argued that the tax should be imposed because it presented a way of raising a great sum quickly, and it was desirable to raise a great sum quickly (*a*) in order to pay off floating debt which caused inflation, and (*b*) because it would be cheaper to pay off debt earlier rather than later, when it may be supposed the value of the pound sterling, whether it is then still a paper pound or a bit of free gold, will be higher than it is now. This argument had to contend with the suggestion of the advocates of a general capital levy that their scheme provided more money just as quickly, and that suggestion could not be really got rid of by ruling it out of order under the reference to the Committee: in fact, the future historian will probably say that the proposal would probably have been carried out if the supporters of a general capital levy had taken the line that half a loaf is better than no bread. The argument was also somewhat damaged by the weakness of its supporters in dealing with the very feeble objection that a great deal of the sum raised would go in the first instance to reduction of the non-floating or long-term debt rather than to reduction of floating or short-term debt: they failed to insist on the fact that the less long-term debt there is the easier it is to turn short-term debt into long-term debt. No doubt if 100*l.* nominal in taxes can in fact be defrayed by the taxpayer buying in the market a bond which only costs him 90*l.*, plus broker's commission, and tendering it for cancellation, the cancellation does not make the State able to issue a similar bond at par, but there is no reason to suppose that either the State or the taxpayer are left in a substantially different position from what they would have been in if the State had given the taxpayer the option of paying 90*l.* direct and he had taken it, as he would have done, in order to save commission.

The question whether it would be economical to take money from the new rich in order to relieve the old rich was scarcely touched

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on. It is obvious that some of the opponents of the tax regarded this as disastrous because they thought of the new rich as the more enterprising: against this it might have been urged that the old rich are more saving, and that what is required at present is more saving rather than more enterprise, but this does not seem to have been thought of.

On the side of equity the chief weakness of the proposal lay in the fact that much of its early popularity rested on the belief that it would hit "profiteers"—persons who had made illegitimate or immoral profits out of the war. It was clearly quite impracticable to distinguish between good and bad profits in this way, and the advocates of the tax failed to fall back, as they should have done, on the widespread feeling that when the mass of mankind has been made so much poorer by the war (as well as suffering so much non-economic loss), it is not "right" that the property of anyone, however great and valuable his services have been, should be increased by it.

As usual, great confusion of arguments resulted from an imperfect appreciation of the effects of the depreciation of money. There seems to have been a general impression that if the purchasing power of a unit of currency falls, money valuation ceases to give a true comparison between the relative position of different individuals. Before the war, say, A has property worth 10,000*l.* and B property worth 20,000*l.*: afterwards A has property worth 50,000*l.* and B property worth 25,000*l.* If the pound is only worth half what it was, then at pre-war prices A is only worth 25,000*l* and B only 12,500*l.*, but if a given amount is to be raised from A and B, this is quite immaterial: the fact remains that before the war A had half as much as B and now has twice as much, and the change in their relative position is the crucial thing in regard to a tax of this kind. Failure to grasp this led to a very general acceptance of what was really a quite fatuous proposal, viz., that a man should not be taxed or assessed on a "mere rise in money-value," so that for example, if the A and B mentioned above had both been living in rented houses worth 2,000*l.* a little before the war, and A bought his for 2,000*l.* in June, 1914, while B was obliged to give 4,000*l.* for his house in 1919, the 2,000*l.* increment to A would be left out of account.

"I am very anxious, if the Committee will allow," said Mr. Chamberlain, "that they should do the work which in ordinary "cases of taxation falls to the Chancellor of the Exchequer alone." The result of this experiment in budgetary method can scarcely be regarded as satisfactory. E.C.

3.—*Some Aspects of the Inequality of Incomes in Modern Communities.* By Hugh Dalton, M.A. Cassel Reader in Commerce in the University of London. 360 pp. Routledge. Price 10*s.* 6*d.*

This interesting and important work has a twofold object. Those acquainted with Professor Cannan's writings will remember he has

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referred to the fact that the general reader who turns to economic works for an answer to a question which would seem to him to be paramount, viz., "Why is one man richer than another?" will invariably be disappointed, because this is the one question to which economic science has given no attention. For a hundred years it has devoted much thought to the question of "distribution," but this has always been a distribution to the several "categories," or the owners of distinct factors of production, each taken as a class. Hitherto the treatment of "distribution" has been almost entirely confined to the determination of the causes underlying the shares of the final product going respectively to land, labour, management and capital, with sundry occasional sub-divisions. It may well be that the total sum going to a given class may increase, while the individual share in that class, owing to an increased number within it, may be less. Such an analysis gives a very inadequate criterion in questions of riches and poverty.

Mr. Hugh Dalton, in the first part of his work, makes a careful and certainly readable investigation into the development of theory along the conventional lines of the analysis of distribution. To some extent he covers familiar ground, but even in dealing with the classical economists he is always fresh and generally convincing. He has the boldness, however, to come down to Professor Pigou's *Wealth and Welfare*, to which he throughout shows much indebtedness, to Taussig's *Principles*, and to Hobson's *Work and Wealth*. He remarks that these recent writers have advanced completely into a new and distinct country, but have left unsettled questions upon their flanks, those questions being the same as the matters ignored by the earlier generation of economists who were obsessed with the study of wages per head, profits per cent., and rents per acre.

Mr. Dalton's own intellectual apparatus and methods are a kind of mean between those of Professor Pigou and Professor Cannan. It was not until Professor Ely's *Property and Contract*, published in 1914, and Mr. Read's *Abolition of Inheritance*, published in 1918, were written, that the subject of distribution, as determined by legal conventions, received proper consideration, but, of course, Professor Rignano in Italy has for some time been doing effective work along these lines.

The next part of the work deals with the same division of income into categories, but treats it in the light of redistribution made by the State or the Community and by the transfer of civic rights, such as the effects of taxation on the one hand, and free education and old age pensions on the other. When dealing with the division of income between a number of factors of production, Mr. Dalton makes an interesting note upon that conception of elasticity of demand and supply with which we have been familiar from Marshall's *Principles*, and shows pretty conclusively that what may be true of the measurement of elasticity "at a point" on a curve, tells us nothing about elasticity corresponding to considerable or finite changes in price. A difference arises in the practical application of the conception of

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elasticity in making a careless transfer of thought from "point" elasticity to "arc" elasticity, which is by no means trivial. We must agree with the author that important ambiguities may arise from it.

When we come to the summing up of Mr. Dalton's argument in this section it is, however, something of a shock to find him stating that the main conclusion which has emerged is an "apparent tendency under modern conditions for the relative share "of property to increase at the expense of the relative share of "work," and on turning back to examine the several points of evidence which have led to this, one finds that they are, many of them, highly conditional and differing in magnitude, so that it seems a little bold to aggregate them in such a positive sense.

Coming to the subject of Mr. Dalton's own proposed new departure of economic enquiry, viz., the division of income between persons, we find that by far the most important factor in his judgment is that of the laws of inheritance which are in force. Although many will regard his practical proposals arising out of this enquiry as exceedingly drastic, we are bound to recognise that they are informed by a spirit and by social and intellectual premises to which most of us can subscribe. We have no crude socialism, nor, indeed, any kind of collectivism, as a main remedy for riches and poverty. For example, he says :—

"The possibility that we should all abandon completely the "pursuit of self-interest and agree, not only to work hard, but to "'share and share alike' in the results of our work, though an occa-"sional theme for writers of imaginative literature, is hardly less "remote than the possibility that the law of gravitation should "be suspended. Indeed, it is perhaps not much more to be de-"sired. . . . What, however, is both practical and desirable, is "to modify the material and moral conditions under which self-"interest is at present pursued, so as to secure from the pursuit "the maximum social advantage."

He denies that we could advance matters by alleging the capitalised system to be the cause of all inequalities. He agrees with Taussig in classing, as the main cause of inequality, inborn differences of gifts and the maintenance of acquired advantages through environment and through the inheritance of property. One is bound to recognise, after reading his interesting account of the very different laws of inheritance and intestacy obtaining in various countries of the world at the present time, that the strong vested rights and rigid environment of hereditary principles which we find in this country are not by any means inherent in the nature of the universe. One cannot help feeling that practices very different from our own, but common to those who are habituated to them, may appear quite as reasonable to them as our own do to us. We have to ask ourselves seriously whether ours can stand the challenge of abstract criticism on the ground of fundamental ethics more easily than those, for example, in the American States. We are led, then, to believe that

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proposals which at first sight seem subversive, may, in a slightly different mental environment, be found to be quite justifiable on the grounds of maximum social advantage. Mr. Dalton is very alive to the frightful evils that would result to the community from depressing the motive of self-interest and hedonic impulse, including in them the welfare of all family interests that are within the reasonable expectation and thought of the average individual. He agrees that the continued accumulation on a large scale is essential to the economic progress of modern communities, and many modern forces, which work for a reduction of inequality, are apt, at the same time, to work against accumulation. Reference must be made to the work itself for his practical suggestions, in which there is wide room for difference of opinion in degree while conceding much to the principles upon which he relies. He himself does not propose more than a simplified application of Professor Rignano's principles combined with graduation of the taxation on individual inheritances. The Rignano tax would apply to that part of an estate which the deceased had himself acquired by inheritance or gift, and would be progressively graduated according to the size of the taxable estate. The net estate remaining would be taxed again according to the amounts of individual inheritances, up to a maximum of 100 per cent., thus giving effect to Mills' suggestion for a limit to individual inheritance.

The average reader will not view, without apprehension, the prospect of a large body of the capital wealth of individuals passing, in the course of a few generations, under State control, even though we may have satisfactory guarantees that State expenditure shall be upon "capital" rather than upon current or ephemeral objects. If such new-gotten resources could be devoted only to debt redemption, there is much to be said for any method which is so fitted to human and social psychology that it can accumulate large State resources without depressing the economic motives that make for progress. J.C.S.

4.—*English Public Finance from the Revolution of* 1688. *With Chapters on the Bank of England.* By Harvey E. Fisk. 241 pp. New York: Bankers Trust Company.

One of the most powerful and prominent financial houses of America is fast adding to its prestige at home and abroad by the publication and wide dissemination of various works upon economic and industrial questions. In the list of the Bankers Trust Company's publications this book certainly takes the premier place, and it is remarkable alike for its accuracy and fullness in detail and its sense of perspective and proportion. Probably nowhere has the story of the way in which Britain financed its war operations been so clearly and concisely told, with both those features which are regarded as essential to the financier and those which are valuable to the economist. Mr. Fisk has also presented the statistics of the war in a masterly way in many carefully drawn tables, and his work is not a

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publication of merely ephemeral interest, but one which might well be prescribed for students and university courses, because in its description of the development of British finance and taxation from their beginnings, it supplies a distinct need. Its detailed appendices contain much valuable matter for reference, in a new form.

The first few chapters deal with special war provision by loans and taxation with its proportion of 63·87 per cent. from borrowing and 36·13 from revenue—"To the observer 3,000 miles away quietly "studying the figures without any other object than to get at the "facts, the results achieved seem little short of marvellous," though we are said to "delight in heckling and finding fault with the "Government." Such results "could only be obtained in a country "where patriotism runs so high that the people demand to be taxed "heavily." A very interesting and striking comparison is made in which it is shown that the expenditure of six years exceeded the aggregate expenditure of the preceding two and a quarter centuries, during which there were eight major wars, fought at an expense so great that the thinking people of the times were appalled thereby. In a concise summary it is shown that the maximum debt (at December, 1919) stood at 8,078,000,000*l.*, held by 17,000,000 investors, compared with 711,000,000*l.* in August, 1914, held by about 345,000 investors. In March, 1920, the debt stood at 7,973,000,000*l.*, over 19 per cent. maturing within one year and 21 per cent. between one and five years. The percentage of the debt charge to the national income is reckoned to have been 8 per cent. in 1817, 1·6 per cent. at the Boer War, and 10 per cent. now, while the percentage of debt to capital was 31·48, 6·13 and 33·65 respectively. Owing to differences in purchasing power the actual burden per capita (50*l.*) probably much more nearly approximated to the present day status (175*l.*) than the figures indicate.

In what is termed the "War Credit Structure" the author shows an increase from 1,227,000,000*l.* in 1913 to 3,002,000,000*l*, or 144·7 per cent., and remarks that Professor Kenmure thinks that the physical volume of trade has not increased so much here as shown in the States (9·6 per cent.) and it is "easy to understand why "prices have advanced in a marked manner." He illustrates the manner in which a disproportionate increase in the credit structure leads to increase in prices by the records of the quantities and values of such commodities as wheat, sugar, tea, cotton and wool. It is held to be "the obvious duty of the banks to hold speculation in "check and gently but firmly to reverse the process of inflation "which the war made necessary." The tables show the "dizzy heights" from which business must cautiously descend. The description of the inflation process is given by way of quotation from the Cunliffe Committee's Report on Currency.

In the historical and descriptive section, Mr. Fisk shows the genesis of our taxes in Saxon and Norman times, not indeed with any fresh research, but from existing authorities with skill and judgment, and to anyone not already versed in the subject, the treat-

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ment can be commended as an excellent introduction to the subject, while the description of the place of the Bank of England in our financial system is excellently drawn. The spirit of this work is one of utmost friendliness and a generous recognition of the good points of Britain's financial position. If there is any disappointment among American financiers that financial leadership has not passed as rapidly or as definitely from London to New York as might have been anticipated from the desperate straits to which we were driven during the war, or any resentment at the lack of indication that it will pass at all, the author of this work shows no trace of either. His independent comments are all the more valued because they are not too numerous, and they can be the more acceptably read as they come from Wall Street. There is everything in the general chorus of encouraging tribute from New York to indicate that proposals for a consolidation and "clearance" of the financial aftermath of loans, debts and credits would receive a ready consideration and sympathetic practical treatment. J.C.S.

5.—*Prices and Price Control in Great Britain and the United States during the World War.* By Simon Litman. x + 331 pp. New York: Oxford University Press, 1920.

This volume is one of a series of Preliminary Economic Studies of the War published under the auspices of the Carnegie Endowment for International Peace. Even the qualifying adjective "preliminary" appearing on the title page will hardly save the reader from a feeling of disappointment on laying the book down. The period covered in the case of Great Britain extends only to the early part of 1918, and thus it excludes not only the study of the economic reactions of control, but also the period of maximum control and, it may fairly be claimed, of maximum efficiency of control; further, even for the period covered, the treatment consists largely of the stringing together of current opinions, often biassed, culled from the Press and periodical literature. The book falls short of the standard of economic analysis which one naturally expects from the academic standing of the author and the editor of the series.

The work opens with a brief survey of price fixing in the past, from the Roman Empire, through the mediæval Gild system, to the period of the French Revolution, and then passes abruptly to the record of actual price movements in Great Britain during the War. In the matter of general price levels the author reproduces the data of all the well-known index-numbers, but makes no attempt to assess their relative value for different purposes, although one of them, that measuring changes in the cost of living of the working classes, is at least open to criticism, as was shown by the Report of the Sumner Committee on the Cost of Living in 1918 and more recent discussion of its basis as officially described in the *Labour Gazette*. One of the most satisfactory chapters is that dealing with the causes of the increase of prices in which the author draws largely on the

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paper by Professor J. Shield Nicholson appearing in the *Journal* of July, 1917. The policy of Lord Rhondda is fairly described as that of fixing the prices of the prime necessaries over the supply of which he could obtain effective control at all stages from the producer to the retailer, but not sufficient emphasis is laid on the conditions which were essential for the success of this policy as was proved by the difficulties which arose when these were withdrawn. The success achieved in stabilizing the prices of imported supplies representing the bulk of our requirements was dependent on the one hand on three conditions, viz., government or inter-allied purchase with restriction of private imports, control of tonnage and freights, and stabilization of the exchanges, and on the other hand, on control, direct or indirect, of consumption.

The account given of measures of control in the United States is naturally more intimate as being by an American author, and it is also more complete. The problem was essentially quite different from that in this country, as is shown by the author's statement that 50 per cent. of American consumers are either themselves producers or live in intimate contact with the producers. The Food Administration had no authority to fix prices by decree, but it could effectively regulate them through the system of licensing dealers, the control of food buying for the army, the navy and the Allies, and the powers to prevent hoarding, speculation and excessive profits. Moreover, the recent work of Dr. Pearl on "The Nation's Food" during the War showed that the War involved no such change in the consuming habits as occurred in European belligerent countries.

It is impossible to check the accuracy of statements in the second half of the work, but attention may be drawn to some points in the first half. Apart from such slips in names as Lord Davenport for Lord Devonport which appears repeatedly, and Mr. Curdy for Mr. McCurdy, and the reference to family incomes of 20*s.* per month, there are more serious misstatements, *e.g.*, regarding the effectiveness of powers to control retail sugar prices, the omission of all reference to the Royal Commission on the Wheat Supplies, and the statement that the United Kingdom harvest of 1918 would provide four-fifths of the yearly requirements of breadstuffs, though a foreign author may perhaps be forgiven for reproducing a statement made by a British official, however absurd it may be.

J.B.G.

6.—*Labour Conditions in Soviet Russia.* Systematic Questionnaire and Bibliography, prepared for the Mission of Enquiry in Russia (International Labour Office). cxliv + 288 pp. London: Harrison and Sons, Ltd. Price 7*s.* 6*d.* net.

In presenting this volume to the public the Director of the International Labour Office (M. Albert Thomas), jealous for the reputation of his young charge, apologizes for its incompleteness, but this very incompleteness is a sterling testimony to the scientific

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and impartial spirit in which the International Labour Office approaches its world-wide task. The volume is no more than a systematic questionnaire prepared for the use of the members of the Mission of Enquiry which is being sent to Russia, both the questionnaire itself and the accompanying data being prepared in a very short space of time. The object of the publication of these preliminary data has been the production of a report of immediate utility, which may be of some help to those who enter Russia in any capacity during the coming months as well as any who may contribute directly or indirectly to the perplexing study of the Soviet system. By the excellent way in which they have summarized the reliable data available at present to Western Europe, by pointing out the gaps in our knowledge, and by defining the questions still to be answered, the collaborators in the work under review have rendered a valuable service to all later investigators; and to the stay-at-home student, lost amid the conflicting accounts of the gigantic economic experiment now being worked out in Russia, this volume will be, if possible, a still greater boon. Space forbids here the mere enumeration of the field of enquiry covered, but apart from the intrinsic interest of the various questions, the volume of information here summarized regarding them renders particularly interesting the chapters dealing with the machinery for the administration of the nationalized industries, the relation of the co-operative movement to the wide powers assumed by the Soviet Government, and the material results of nationalization as illustrated by statistics of production in the principal industries. Last, but not least, for the student, the work in its present form gives what is undoubtedly the most complete bibliography that is at present available to the public of western countries dealing with the problems which in Russia have been created "either by human will or the implacable sequence of events."

But beyond the active investigator and the student, this work will appeal to everybody who has at heart the interest of his own country, in any part of the world. As was pointed out by the Workers' delegates in urging the International Labour Office to undertake the task of which this is the first fruits, "There is at "present amongst the working classes as a whole a grave unrest "which is due to a great extent to a complete ignorance of what is "happening in Russia. Some people go about saying that every-"thing is perfect, and on these the mirage of the Bolshevik paradise "exercises a fascination all the more powerful from the fact that the "workers are suffering more and more from the economic and social "disorder caused by the War. Others, on the contrary, launch "accusation after accusation against the Soviet regime, and "moderate opinion trembles at the very thought of even the most "legitimate reforms. This unrest will vanish only if we try to "discover the truth about labour conditions, and the situation of "the working classes in Revolutionary Russia." The International Labour Office must command the admiration of all, alike for the

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courage with which it has undertaken this huge task and for the discretion with which it has carried out the first stage of it.

J.B.G.

7.—*An Economic History of Rome, to the end of the Republic.* By Tenney Frank. 303 pp. Baltimore: Johns Hopkins Press, 1920.

Material for the reconstruction of economic conditions in republican Rome is so scanty that, in the author's words, "the lack of "easily interpreted data has . . . rendered the task almost "impossible," and the extent of his accomplishment is to be measured by its difficulty. In this interesting volume Mr. Frank has brought to light many new facts and has linked them into a logical narrative, upsetting, in the process, some ancient theories. He holds that the peculiar circumstances of the Roman State not only permit but dictate the rejection of theories based on the experience of other nations; and finds that the Roman wars of conquest did not spring from directly economic motives. Not only was foreign trade almost non-existent and industry unimportant under the Republic, but it is certain that their development did not interest the rulers of Rome, whose pre-occupations were entirely political, and who, as a class, despised trade and traders. The need for trade, moreover, had not really made itself felt, since the surplus population and capital of the Republic were easily absorbed by the army and by the colonising of the Italian provinces. Throughout the republican period agriculture was the main and almost the only important industry, and the gradual transformation, as exhaustion of the soil proceeded, of the small holdings, more and more intensively cultivated, into pasture and vineyards owned by capitalists and worked by slave labour, is shown more clearly than ever to be responsible for the political transformation through which the Republic became the Empire and the nation of citizen farmers gave place to an irresponsible populace under military rule. The agricultural history of Rome, in fact, forms the main thread of the book. The order adopted is in the main chronological, with digressive chapters on special subjects, as Roman Coinage (V), Capital (XIII), Commerce (XIV), the Labourer (XV). The chapter on coinage is particularly interesting; the account of the currency problems arising from Rome's dual standard, and the skilful manner in which she solved them, are well explained. Incidentally, the reduction in the value of the *as* in 267 is shown to have been not an act of debasement but a wise adjustment to meet an alteration in values—one, moreover, which probably resulted in a slight loss to the government, certainly not, as Pliny assumed, in a large profit. The comparison of Roman values, or "costs of living," with those of the present day, or rather, the demonstration of the falseness of any superficial comparison and of the quasi-impossibility of making a true one, forms not the least interesting part of this chapter. Altogether, the book should serve to illuminate the political history of Rome, as well as the economic history of the ancient world.

C.T.

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8.—*The Early English Cotton Industry.* By George W. Daniels, M.A., with an introductory chapter by George Unwin, M.A. xxi + 214 pp. London: Longmans, Green and Co., 1920. Price 8*s.* 6*d.* net.

This volume is No. xxxvi of the Historical Series of Publications issued by the University of Manchester. Thanks to Mr. J. W. McConnel the neatly preserved documents for the period 1795 to 1835 relating to the business of which he is one of the principals at Ancoats, near Manchester, have been the incentive, and a large part of the raw material of this useful, detailed and accurate description of the development of the English Cotton Industry from its beginning in the early sixteenth century to about the end of the third decade of the nineteenth.

The story is excellently introduced by Professor Unwin, who briefly describes the rise and growth of the industry in Europe, indicating the historical background and the world-wide character of the subject, and illustrating how the removal of restrictions on the free flow of capital was one of the main factors in the Industrial Revolution.

Mr. Daniels sets out by tracing the early stages of a cotton manufacture. Although in the sixteenth century "cottons" were regarded as a species of woollen cloth, by 1621 a cotton manufacture had become established in England and had attained a considerable magnitude, introduced doubtless by immigrants half a century or more earlier. Originally founded in Dorset, "it is evident that "in 1654 there was a definitely established industry in Lancashire "dependent for its prosperity upon regular supplies of cotton-"wool," while at the close of the seventeenth century the annual import amounted to nearly 2,000,000 lbs., giving employment to fustian, check and smallware weavers and merchants.

Figures are given in the chapter on organization showing the stocks that were carried by the larger cloth merchants, upon whom about 1620 the buyers were economically dependent to the extent of the cost of their raw materials, as they probably were for the disposal of their products. The fustian weavers were certainly the workpeople of capitalist employers during the first part of the eighteenth century. With the increase in the cost of living in the middle of the century came attempts at combination to raise wages by the check and smallware weavers, and the authoritative system of regulation of industrial relationships finally broke down, giving birth to the modern trade union movement. In the latter years of the century in question a new cotton manufacture arose in Lancashire, owing not only to the remarkable inventions of machinery (to the details of which an informative chapter is devoted), but also to the discovery of a new source of power, developments in industrial and commercial organization and improvements in means of communication.

Mr. Daniels concludes with a complete account of Crompton's mule, invented in 1779 and worked in turn by hand, water and

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steam power, tracing the transition of industry from the agricultural districts to the towns which lead to a short burst of prosperity for the workpeople prior to the outbreak of the Napoleonic War. A series of original letters of Samuel Crompton, from 1802 to 1812, are fittingly quoted at the end of a most interesting study in economic history.

Scattered about the book, Mr. Daniels gives a number of tables for the Manchester area in 1772 showing the number of fustian, check, small ware, silk and linen manufacturers; country tradesmen with town warehouses; crofters and whitsters; regular carriers; a map showing the location of manufacturers and crofters; and also a table showing the relative number of "mule" and "ring" cotton-spinning spindles in use during 1910, 1911, 1912 and 1913 in Great Britain, as compared with "all countries."

A. F.

9.—*Other New Publications.**

Ashley (*Percy*), C.B. Modern Tariff History. Germany—United States—France. 3rd edition. x + 365 pp., 8vo. London: John Murray, 1920. Price 16*s.* net.

[The first and second editions of Mr. Ashley's book were reviewed at length in the *Statistical Journal* for March 1905, and December, 1910. The character and form of the work remain unchanged in the present edition, but the narrative has been brought up to the outbreak of the war by the addition of a chapter on the United States Tariff of 1913, and the inclusion of statistics relating to the years 1909–13. The narrative necessarily ends with the beginning of the war, which suspended the normal economic life of France and Germany, and as regards the United States and other countries, trade conditions were created in which tariff policy played no part.]

The British Year Book of International Law, 1920–21. viii + 292 pp., 8vo. London: Henry Frowde, and Hodder and Stoughton, 1920. Price 15*s.* net.

[The promoters of this publication are of opinion that a wider knowledge of international law is essential at the present time, and that a British periodical devoted to this subject would help to this end. The purpose of the Year Book is mainly, therefore, to provide scope for well-informed contributions to the science of international law wherein the fruits of research may be applied to present-day problems. The present issue contains articles by most of the eminent men who are the promoters of the periodical, but it may be questioned whether the publications of the Society of Comparative Legislation do not already cover most of the ground undertaken by this new venture.]

Carnegie Endowment for International Peace. A Monograph on Plebiscites, with a collection of Official Documents. By Sarah Wambaugh. xxxv + 1088 pp., 4to. New York: Oxford University Press, 1920.

[This study has been prepared under the supervision of Dr. James Brown Scott and has been carefully limited to the use of plebiscites with reference to changes of sovereignty. The numerous occasions on which a plebiscite has been taken to determine a form of government or the personality of a sovereign have been excluded, nor has any attempt

* See also "Additions to Library," page 145, *sqq.*

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Carnegie Endowment for International Peace—Contd.

been made to deal with the many territorial questions which have arisen since 1914. With these exclusions, the volume is a careful survey of the different plebiscites which have been taken from the period of the French Revolution, when the doctrine of national self-determination properly began, up to 1905 with the separation of Norway from Sweden. It is claimed that this is the first adequate treatment of the subject, and its appearance is timely in view of the fact that the Peace Treaty of Versailles provides for plebiscites to be held in many instances. The table of contents is commendably full, as it should be in a work of this kind. There is also a chronological list of cases of change of sovereignty involving plebiscites, and in addition to a bibliography, there is also an historical summary of the subject and a fair index.]

——— Treaties for the advancement of Peace between the United States and other Powers, negotiated by the Hon. William J. Bryan, Secretary of State of the United States. lxix + 153 pp., 8vo. New York: Oxford University Press, 1920.

[This book is divided into two parts, the first containing those treaties that were perfected, and the second those that were not. There is a table showing the present status of these treaties, the object of which was rather to supplement than supplant existing agreements. Dr. James Brown Scott contributes a lengthy introduction to the book.]

The Republic of Finland. An economic and financial survey. Edited by the Central Statistical Bureau. 76 pp., maps and diagrams, 4to. Helsingfors, 1920.

[This illustrated volume has been compiled to provide visitors, business men, and others interested with a general *résumé* of the aims and scope of the Finnish Republic, especially in regard to economic matters. The maps and diagrams are well drawn, and the latter illustrate clearly the facts which it is desired to emphasize by graphic representation. The illustrations give the idea of a busy, prosperous country, and those relating to national defence show that there is no lack of energy on the part of those responsible for this branch of the public service.]

Green (*F. E.*). History of the English Agricultural Labourer, 1870–1920. x + 356 pp. London: P. S. King and Son, Ltd., 1920. Price 16*s.* net.

[The author suggests that the history of the English agricultural labourer should be written, if possible, by one of that class; and though he cannot claim to be such, he has tilled the land for many years, and can therefore write from actual experience. The war led the nation to discover that the agricultural labourer was an invaluable and highly skilled worker, by no means easily replaced, and it is to be deplored that as a class he was so poorly paid and neglected. The author begins his history at 1870, because it was soon after that year that Joseph Arch began his agitation for the improved industrial life of the agricultural worker. The first three parts of the book deal with conditions prior to 1872, during that year, and with the lock-out of 1874. Parts iv and v deal with the early 'Eighties, the 'Nineties and 1894. The agricultural depression of the 'Eighties, resulting from bad harvests and falling prices, with its consequent reduction in wages, are fully described. The Parish and Rural District Councils, established under the Local Government Act of 1894, and their effects on the conditions of rural life are considered, and also the agitation for small holdings and better housing. The remaining chapters deal with the conditions existing since 1900 up to the outbreak of the war, including a lively description of Mr. Lloyd George's land campaign. The author describes what followed the declaration of war; how the first to leave the farms were the reservists, followed shortly by the able-bodied

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Green (*F. E.*). History of the English Agricultural Labourer—*Contd.*
youths and unmarried men, and how children were employed to lessen the consequent scarcity of labour. The setting up of the Agricultural Wages Board and the present economic position of the farm worker are also described. The appendices of statistical tables showing prices and wages before, during, and after the war, form a valuable supplement to the book, which is tinged with a certain bitterness inevitable, it would appear, in a history of this subject.]

Hare (*Sir Lancelot*), K.C.S.I. Currency and Prices. 74 pp. London: P. S. King and Son, Ltd., 1920. Price 2*s.* 6*d.* net.

[The author would "fix the value of the currency unit upon as many items of goods and services as possible, and not only upon gold," and he would apply statistics of prices to construct what he calls a valometer which is to be a practical guide in the control of the currency, enabling us to keep our standard constant and invariable (Preface, p. 7). We need, in fact, an index-number (p. 14). Government has shown scant wisdom in the matter. Stability seems to be the last thing they think of (p. 15). He shows how depreciation and variation have caused not only loss to Government itself, but widespread distress among the people. Few will dispute the truth of his description of this distress.]

Institut International d'Agriculture. Annuaire International de Statistique Agricole, 1917 et 1918. xlix + 747 pp., 8vo. Rome, 1920.

[The present edition of this most useful book of reference is in continuation of the volume dealing with 1915–16, and is the fifth of the series. It is the last annual of an international character dealing with countries as they were before the war as regards their political boundaries, with the result that certain States which have now disappeared still figure in its pages and certain new States are not mentioned. In the main, the volume is on the lines of earlier issues, and forms the most complete statistical record in existence of the agricultural conditions of the civilized world. The book is published at 15 francs, a marvel of cheapness in these times.]

Jones (*Paul van Brunt*). The Household of a Tudor Nobleman. University of Illinois Studies in the Social Sciences. Vol. VI, No. 4. December, 1917. 277 pp. Urbana: The University.

[A repertory of minute information, of more interest to antiquaries than economists, collected from previously published works, selections from the household books of noblemen and reprints of other fifteenth and sixteenth century documents; and relating to the personnel, household staff, menus and management of typical wealthy noble families of the period. No price lists are given, though some food and other prices are scattered through the text. Nor does the index help here, though it is a very full one—even over-full in places.]

Labordère (*Marcel*). L'Or et la vie chère. 163 pp. and folded table, 8vo. Paris: Editions Scientifica, 1917.

[This study is composed mostly of two articles contributed by the author to the *Revue de Paris* in 1914 and 1915, and is an endeavour to establish the relation between prices, whether high or low, and the quantity of gold, paper money and bank deposits in the civilized world during the periods 1891–1900 and 1901–10. There are appendices, several containing statistics of the production of the precious metals and various commodities for a long series of years, but the book lacks a preface and table of contents.]

Pagar (*Shankar M.*). The Indian Income Tax. Its history, theory and practice. 219 pp., 8vo. 1920. Price 8*s.*

[The author claims that in this study of the Indian income tax, he has to a certain extent broken new ground as, apart from the official reports,

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Pagar (*Shankar M.*). The Indian Income Tax—*Contd.*

the literature dealing with Indian finance is slight. He divides his book into sections, dealing respectively with (1) direct taxation in India; (2) principles and provisions in regard to taxation of incomes; (3) assessment of incomes; and (4) the results of the tax. Each of these sections is divided into several chapters, a perusal of which indicates that the author has treated his subject with commendable though brief thoroughness. The author offers several suggestions and criticisms on the present working of the tax, the principle of which he considers to be sound.]

Raffalovich (*Arthur*). Le Marché Financier. Les dettes publiques et l'inflation pendant la guerre. 26e volume, 1914–19. 191 pp., 8vo. Paris: Felix Alcan, 1920. Price 8 francs.

[One of the drawbacks of the war was the stoppage of several important yearly publications which had come to be regarded as indispensable, and among these may be classed M. Raffalovich's annual review of the world's principal financial and economic events. Owing to the war it was impossible to obtain precise information on these heads in regard to many countries, and the publication of what was obtainable was undesirable. The present volume is an attempt to compensate for the missing volumes, and brings together a series of articles contributed by the author to the *Journal des Economistes* during 1915 to 1920; with the addition of studies on national loans and the inflation of the currency, both written with the author's usual skill.]

Raine (*C. E.*) and *Luboff* (*E.*). Bolshevik Russia. 192 pp. London: Nisbet and Co., 1920. Price 1*s.* net.

[Written for popular enlightenment on the present condition of Russia, this little book includes evidence in the shape of translations of official documents issued by Lenin's Government. In Chapter vi a report on Russian industry, presented by M. Rykoff to the Congress of National Economic Councils held at Moscow in January, 1920, is quoted in full (pp. 107–22). This gives pre- and post-revolutionary figures of production in the various branches of agriculture and industry, with some relating to transport. The figures are eloquent, and M. Rykoff frankly says that "to lift the blockade will not end the crisis." The decree enforcing compulsory labour is also given in full (Chapter iv); and the appendix consists of the "Constitution of the Russian Socialist Federal Soviet Republic," and the decree establishing control of industry by the workpeople. Other useful facts, collected from sources apparently trustworthy, are included in the volume.]

Schmidt (*Dr. Peter H.*). Die schweizerischen Industrien im internationalen Konkurrenzkampf. Zweite Auflage. viii + 214 pp., 8vo. Zurich: Art. Institut Orell Füssli, 1920. Price 10 francs.

[The first edition of this study on Swiss industries in relation to international competition was briefly noticed in the *Journal* for June, 1912, and has been out of print for some years. The present edition has been enlarged and generally brought up to date, and an index has been added. The appendix of statistical tables which appeared in the first edition has, however, been omitted.]

Turin (*S. P.*). Problems of Labour in Great Britain. xi + 68 pp. London: Renaissance Publishers, 1920.

[A translation of "Labour and the New Social Order," being the reconstructive programme adopted by the Labour Party at the Nottingham Conference in 1918. A very full bibliography and some statistics of wages, prices and unemployment, taken from the *People's Year Book*, add to its value as a means of removing misunderstandings of British Labour by Russia. Particularly, it should free the labour movement in this country from the charge of imperialism too frequently levelled against it by revolutionary Russians.]

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Webb (*Sidney* and *Beatrice*). Industrial Democracy. Edition of 1920, with new Introduction. xxxix + 899 pp. London: Longmans and Co., 1920. Price 21*s.* net.

[This edition begins the fourteenth thousand of a book first published in 1897. The original text is left unchanged as "an analytical description of British trade unionism as it was in the last decade of the nineteenth century." Two appendices on the legal position of trade unions and the legal minimum wage-regulation of Australia and New Zealand have been omitted, as well as the bibliography. A new introduction of 13 pages draws attention to the most important changes since 1897, and refers the reader to various other works by the same authors in which some of them are discussed. Perhaps the most important of the topics not dealt with in the first edition are the premium bonus system and the problem of organization by crafts or by industries. The authors indicate that in their view no modification of piece-work can be entertained which involves a return to individual bargaining, and that the industrial organization which may be most effective for fighting employers may not be the best vocational organization in a Socialist Commonwealth.]

Webb (*Sidney*). Grants in Aid: a criticism and a proposal. New edition. viii + 145 pp., 8vo. London: Longmans and Co., 1920. Price 7*s.* 6*d.* net.

[The first edition of this book was issued in 1911, and since that date the question of grants in aid has practically remained unchanged. While the total expenditure of local authorities has greatly increased, nothing has been done to redress the grievances and remove the anomalies which hamper the efficiency of local government. It was understood that the Government in 1914 intended to extend the system of grants in aid, notably as regards public health and education, but were prevented by the war. During the last six years the difficulties of local authorities have increased, and though a partial reform has been effected as regards grants for education, the question has not been dealt with as a whole, and its reform is urged by the author as of pressing necessity. The book is divided into eight chapters; there is an extensive and valuable bibliography, dating back to 1833; and an adequate index.]

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CURRENT NOTES.

The aggregate figures of value of imports, exports and re-exports for the year 1920 are of record magnitude, the increases compared with 1919 being 310,500,000*l.* for imports, 536,900,000*l.* for exports of domestic produce, and 57,600,000*l.* for re-exports. For these large increases, the higher level of prices which characterised 1920 is largely responsible, in spite of the set-back in prices generally which began to be manifest in the spring and became very marked in the closing months of the year. It is noteworthy that the proportion of the value of imported raw materials to that of other imports, after deducting re-exports in each case, though not as high as in 1919, was markedly higher than in 1913. The large increase in imports of goods in the class "wholly or mainly manufactured" is even more striking, the net imports of such goods advancing in value by 56 per cent., or more than three times the percentage advance in the value of net imports as a whole. Exports of goods of home manufacture advanced in value in even greater proportion, namely by over 74 per cent. compared with 1919. In the last half of the year both imports and re-exports showed falling values, but it was not till December that British exports showed a marked fall in values, and even then the figures of a year earlier were not reached. The excess in value of imports over exports, which in 1919 reached the startling figure of nearly 663,000,000*l.*, fell to nearly 379,000,000*l.* in 1920, or under 20 per cent. of the value of imports, compared with over 40 per cent. in 1919 and nearly 18 per cent. in 1913.

We give below our usual comparison of the figures for 1919 and 1920.

000's omitted.

	Twelve months ended Dec. 31, 1919.	Twelve months ended Dec. 31, 1920.	Increase (+) or Decrease (−).
Imports, value c.i.f.—	£	£	£
I. Food, drink and tobacco	719,118,	767,373,	+ 48,254,
II. Raw materials and articles mainly unmanufactured	606,784,	711,501,	+ 104,717,
III. Articles wholly or mainly manufactured.....	295,955,	454,823,	+ 158,868,
IV. Miscellaneous and unclassified (including parcel post)....	4,299,	3,045,	− 1,254,
Total merchandise.....	1,626,156,	1,936,742,	+ 310,585,

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000's omitted.

	Twelve months ended Dec. 31, 1919.	Twelve months ended Dec. 31, 1920.	Increase (+) or decrease (−).
Exports of produce and manufactures of the United Kingdom, value, f.o.b.—	£	£	£
I. Food, drink and tobacco	33,771,	50,893,	+ 17,122,
II. Raw materials and articles mainly unmanufactured	111,290,	145,655,	+ 34,365,
III. Articles wholly or mainly manufactured	641,484,	1,120,732,	+ 479,247,
IV. Miscellaneous and unclassified (including parcel post)	12,093,	18,289,	+ 6,196,
Total British, foreign and colonial	798,638,	1,335,569,	+ 536,930,
Shipping—			
Entered with cargoes—	Net tons.	Net tons.	Net tons.
British	22,079,	25,530,	+ 3,451,
Foreign	7,491,	10,987,	+ 3,496,
Total	29,570,	36,518,	+ 6,947,
Cleared with cargoes—			
British	21,963,	23,408,	+ 1,445,
Foreign	12,599,	13,181,	+ 582,
Total	34,562,	36,589,	+ 2,027,

The *Board of Trade Journal* for January 20 furnishes a comparison of the foreign trade of 1920 with that of 1919, and of the four quarters of the year 1920 among themselves, by the use of computed values obtained by assigning to the several commodities making up the trade of 1919 and 1920 the average values derived from the 1913 records. The aggregate results, expressed in percentages of the 1913 aggregates, are as follows :—

Volume of Trade, compared with 1913 (= 100).

	1919.	1920.				
	Year.	Jan.–March.	April–June.	July–Sept.	Oct.–Dec.	Year.
Total imports	88·4	95·2	96·6	90·6	73·1	88·4
Re-exports	78·2	109·8	94·9	79·5	72·4	90·3
Exports of U.K. produce	54·9	71·3	73·5	73·6	65·4	70·9

The effects of the slump, particularly manifest in the fourth quarter of 1920, are seen differently in the three lines of this table,

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both in regard to the time at which the effects were manifested and the measure of their violence.

The extent of price-variation has also been notably different in the different sections of the trade, and the following table summarises the results given in the article cited, and in a similar article published early last year :—

Average Price-level compared with 1913 (= 100).

	1919.	1920.				
	Year.	Jan.–March.	April–June.	July–Sept.	Oct.–Dec.	Year.
Total imports	240	284	285	289	283	285
Re-exports	192	220	229	240	213	225
Exports of U.K. produce	277	326	358	376	373	358
Raw materials. Net imports	252	346	329	283	247	302
Manufactured goods exported	272	314	332	375	375	354

In continuation of statistics relating to employment within the United Kingdom, quoted on p. 703 of the July *Journal*, returns from trade unions with a total membership of over a million and a-half showed the following percentage of their members as unemployed at the end of the months named :—

June .... 1·2 per cent.	August .... 1·6 per cent.	October.... 5·3 per cent.
July .... 1·4 „	September 2·2 „	November 3·7 „

The high figure for October reflects the stoppage of industry by the interruption of coal supplies during the strike, and is exclusive of workers in the coal industry itself. Otherwise the figures show a steady growth of unemployment from which the leather, cotton and linen trades were the first to suffer, but which subsequently became general, being precipitated by the dislocation arising from the coal strike. These returns relate principally to skilled workers. With regard to employment generally among skilled and unskilled workers, the percentage unemployed among workpeople covered by the Unemployment Insurance Acts, which stood at 2·68 on May 28, reached its minimum, 2·62, on June 25, and thereafter rose steadily, standing at 2·73 on July 30, at 2·88 on August 27, and at 3·80 on October 1. These comparable figures cease with the coming into operation in November of the new Unemployment Insurance Act, which covers, it is estimated, 11,200,000 people. Of this total the number unemployed at November 26 was 414,585, or 3·7 per cent. At the same date the number of men and women

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on the Live Registers of the Employment Exchanges was approximately 477,000, as compared with 287,000 on June 25. Returns received from employers show a steady shrinkage month by month in the numbers employed and the total wages paid, so that for the last two dates quoted the numbers fell below those of a year before, though the wages paid were still above those of the preceding year.

Week ending	Textile trades. Percentage change on a year ago.		All trades covered by the returns. Percentage change on a year ago.	
	Numbers employed.	Wages paid.	Numbers employed.	Wages paid.
June 26	+ 11·8	+ 55·2	+ 10·6	+ 46·4
July 24	+ 10·1	+ 47·0	+ 8·0	+ 39·4
August 28	+ 8·6	+ 40·6	+ 6.4	+ 33·9
September 25	+ 4·8	+ 31·7	+ 2·8	+ 24·5
October 30	— 0·0	+ 2·8	— 2·1	+ 4·4
November 27	— 2·0	+ 2·1	— 2·9	+ 4·3

As regards conditions of employment in Germany, according to statements appearing in the *Reichsanzeiger* and the *Reichsarbeitsblatt*, the appreciation of the mark and internal difficulties, especially in the matter of coal supplies, led to considerable unemployment in May, returns from trade unions with a total membership of over five millions showing 2·7 per cent. of their members as unemployed at the end of that month. The depression became more marked in June and July, the unemployment rate quoted above rising to 4 and 6 per cent. respectively. By September, however, there was an improvement, the figure falling to 4·5, and in October to 4·1 per cent., but it was pointed out that these figures were still very greatly in excess of a year before, that the improvement was very uneven as between trades, that considerable sums were still necessary for relief of the unemployed, and the whole position remained very uncertain. With regard to employment in Scandinavian countries, the trade union unemployment rate in Norway fell during the second quarter of 1920 from 1·3 per cent. to 0·7 at the end of June, being throughout about half the rate for the corresponding part of 1919, but in the third quarter the increase to 1·7 per cent. at the end of September reversed the relationship with the preceding year. For Sweden the latest figure quoted by the *Labour Gazette* relates to the beginning of August when the trade union rate of unemployment stood at 2·8 per cent., comparing favourably with the preceding month and with August, 1919 (3·8 per cent.). For Denmark the latest figure is for the end of August,

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when the percentage stood at 2·4, as compared with 2·1 for June and July and 2·8 at the end of May. According to returns received from trade unions and published in the Canadian *Labour Gazette*, the percentage of unemployment in Canada, which stood at 2·83 in April, reached its minimum in June (2·48). The increase in July (2·64), which was contrary to the normal seasonal movement, also reversed the favourable comparison with the preceding year which had hitherto existed, and by September, with a rate of 3·25 per cent., the comparison with September, 1919 (2·19), had become marked. The United States Bureau of Labour Statistics publishes in the *Monthly Labour Review* figures illustrating changes in the volume of employment in representative manufacturing establishments in thirteen selected industries. The movement revealed is similar to that in Canada. Up to July the comparison with 1919 is favourable in all the more important industries except the woollen trade. Between April and May, however, the effect of the railroad strike had been seen in a contraction of employment which by July was marked in every industry quoted except cotton. Thus, in spite of a certain recovery in coal-mining, in the iron and steel trades and in the woollen industry, the comparison with a year before became increasingly unfavourable up to September, the date of the latest returns available.

The following table summarises the estimates of changes in the general level of retail prices as prepared by the Ministry of Labour :—

Date.	Percentage change since July, 1914.	
	Retail prices of principal foods.	All retail prices included in the return.
July 1	158	152
August 1	162	155
September 1 ...	167	161
October 1	170	164
November 1	191	176
December 1	182	169

It will be seen that food prices have been the dominating factor in changes in the general level of prices. Up to October 1, with the exception of the increase in home meat following upon the removal of control in July, the total increase was not out of proportion to the normal seasonal movement. The sharp increase on November 1 was due to the partial removal of the bread subsidy,

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which added about $3\frac{1}{4}d.$ to the price of the quartern loaf. By December the effect of the break in the world's produce markets began to be felt; there was a reduction of $4d.$ in the retail price of sugar, the effect of which was practically identical with the fall in the food prices index-number for that date; that is, other minor decreases balanced the upward tendency of seasonal prices. In the case of items other than food, from October 1 the effects of the Rent and Mortgage Interest (Restrictions) Act began to be taken into the calculation, and during the period under review there were increases in coal prices and railway fares, but other items, especially boots and clothing, showed a downward tendency.

The *Labour Gazette* publishes from time to time the latest official data as to movements of retail food prices in other countries. As regards the other parts of the British Empire, in Australia food prices, which stood in May at a level 77 per cent. above that of pre-War prices, continued to rise till the increase in September was 97 per cent., but in October there was a reaction to 92 per cent. In New Zealand the upward movement of food prices, as measured by returns received from 25 representative towns, continued, the percentage increase on pre-War prices advancing from 67·4 in July to 77·5 in October, and the same holds good of food prices in the nine capital towns of the Union of South Africa, where the increase mounted from 88 per cent. in May to 97 per cent. in October. In India (Calcutta), on the other hand, from July onwards there was a steady fall, and in November the increase was 61 per cent., as compared with 71 per cent. at the earlier date. In Canada also food prices from June to October continued to decline, the increase since July, 1914, shrinking from 128 to 114 per cent. When fuel, lighting and rent are included, the downward movement was much more uncertain, but owing mainly to the small increase in rents, which in October stood at only 35 per cent. above the pre-War figure, this total index-number has never reached anything like the same height as the food index-number, and in October showed a total increase of 87 per cent.

In the United States retail food prices rose till June, reaching 115 per cent. above those of July, 1914, at which level they remained next month, but this was followed by a break which by November had reduced the increase to 89 per cent. The general level of food prices in French towns with over 10,000 inhabitants (excluding Paris) during the second quarter of 1920 stood at 279 per cent. above those of the third quarter of 1914, showing an increase of over 18 per cent. over the preceding quarter. In the third quarter,

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although the total increase had risen to 288 per cent. the rate of growth was very much less. The index-number of food, fuel and lighting prices in Paris fell slightly in June to 269 per cent. above July, 1914, prices, but thereafter rose steadily till the increase in October was 320 per cent. As regards Italy, both the Rome and the Milan data show a slight tendency for retail prices to break about June and July, and after that a resumption of the upward movement, so that in Rome by October the increase since April, 1914, was 241 per cent. for food and 248 per cent. for necessaries generally, while in Milan for November the corresponding increases were 415 and 411 per cent. The Belgian unweighted index-number of retail prices generally now covers about 60 localities; here also a temporary fall in June and July was followed by an upward movement, bringing the increase since April, 1914, to 377 per cent. in October, as compared with 361 per cent. six months before, while for articles of primary necessity, practically exclusively food, the increase was 393 per cent., as compared with 377 per cent. six months before.

In Norway the increase in retail food prices since July, 1914, grew steadily from May (211 per cent.) to October (240 per cent.), the increase in all prices included under general household expenditure being 195 and 239 per cent. in May and October respectively. In the neighbouring country of Sweden the upward movement in prices (food, fuel and lighting) was stayed in August (208 per cent. increase), though up to November (203 per cent.) the reduction was not very marked. Dutch (Amsterdam) food prices continued to rise, the increase in October since 1913 reaching 125·9 per cent., as compared with 108·5 six months before.

As regards wholesale prices in the United Kingdom, movements of the *Statist* and the *Economist* index-numbers have been as follows :

End of	*Statist* index-number.	*Economist* index-number.
July, 1914	82·4	116·6
June, 1920	225·7	356·7
July, 1920	254·6	358·0
August, 1920	253·5	352·0
September, 1920	348·7	347·5
October, 1920	239·9	326·1
November, 1920	223·8	299·7

Both index-numbers show that after a period of relative stability during July a downward movement set in, gathering considerable

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force during October and November. The total decrease during the five months under review amounted to 16 per cent. according to the *Statist*, and 12½ per cent. according to the *Economist*. The decreases in the groups of items are put by the *Statist* at 10½ per cent. for foodstuffs, 31 per cent. for textiles, and 10 per cent. for sundries, while minerals alone showed practically no change, the net decrease for the period being little over 1 per cent. The *Economist* attaches a smaller measure to the fall in foodstuffs (2 and 6½ per cent. respectively for the two food groups), but emphasises the fall in the other groups, especially textiles (35½ per cent.). Compared with the level of prices two years before at the date of the Armistice, the *Statist* at the end of November, 1920, shows an increase of 14½ per cent., but the *Economist* puts it at only 6 per cent., the latter covering increases of 11 to 15 per cent. for food, and 39 per cent. for minerals, whereas textiles, which reached the highest post-armistice level of any group, viz., 61 per cent. in March, 1920, had fallen to 11 per cent. below the armistice level, and the miscellaneous group to 4 per cent. below that level. Since July, 1914, also, the increase in the general level indicated by the *Statist* (171½ per cent.) was considerably in excess of that given by the *Economist* (157 per cent.).

In the Preface to the fourth edition of his *Elements of Statistics* (P. S. King and Son, Ltd., price 24*s*.) Dr. Bowley states that Part I is substantially as in the first edition, save for some re-arrangement of the order of subjects and the substitution of more recent statistical material, but that Part II has been re-written and extended. Both parts can be obtained as separate volumes but not with separate indexes. The subjects dealt with in Part II include "Frequency Groups and Curves," "Probability and the Normal Curve of Error," "Law of Great Numbers," "Correlation" (three chapters), etc. The fact of a fourth edition having been called for is sufficient evidence of the usefulness of the book to a certain class of students. We are told in the Preface that the book—so far as concerns its first edition, at least—is based on lecture notes. From a cursory examination of random samples of the pages of the book, we incline to the opinion that this method of production is not altogether free from defect. There is, we think, a danger of the author leaving out explanations from his text which he would naturally give in his lectures. As a case in point we would cite the equations on p. 251. The whole of the nomenclature would be much easier to grasp if the author had first given exact explanations of his symbols, *e.g.*, the difference between "m′" and "m."

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A perusal of that and the following page impresses on us very forcibly the desirableness of a uniform code of symbols. Professor Bowley introduces "κ" as the symbol of skewness, for which Prof. K. Pearson has adopted "β." We note also that Prof. Bowley uses "m" where other writers use "μ." Such multiplicity of symbols may be immaterial to highly skilled mathematicians, but to those of the lower degrees it is very confusing.

A third edition of the same author's *Elementary Manual of Statistics* (Macdonald and Evans, price 7*s.* 6*d.*) is also now published. We have been unable to find any variation from the second edition.

Many tables, extending the information to more recent years, have been added to the new edition of Sir Josiah Stamp's well-known *British Incomes and Property*. Otherwise the test is unchanged. We hope he will give us, before long, an analysis of the new material showing the extent of the redistribution of incomes since 1914, and clarify our ideas with regard to the "new rich" and the "new poor."

In the *Bulletino del Lavoro e della Previdenza* for June, 1920, Dr. I. Messina returns to Cantelli's Theorem. He clears up the distinction between this theorem and Bernoulli's and discusses the empirical postulates on which the practical applications of both theorems rest. As regards the first point, both theorems state that the probability of a certain event is as near unity as we please when the number of trials is sufficiently increased. In Bernoulli's theorem the event in question is that the ratio of successes to attempts in n trials should differ by less than a specified amount from the theoretical probability of success in a single trial. In Cantelli's theorem the corresponding event is that the ratios of successes to attempts in n trials, $n + 1$ trials, $n + 2$ trials, and so forth, should differ by less than specified amounts (either constant or decreasing in a specified manner) from the same probability. The second point is too general to be treated briefly, as it deals with the conditions under which the exact science of probability may be employed to obtain results which hold with "practical certainty" in daily life.

More than seventy years ago, Dr. John Hutchinson contributed to our columns (*Journal Stat. Soc.* vii, 193) a memoir dealing with the assessment of physical fitness by means of the respiratory capacity, or vital capacity, which is the volume of air a person can expire

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after filling his lungs to the greatest possible extent. Professor Georges Dreyer, of Oxford, has recently devoted much research to the relation between vital capacity and certain measurements of the body, with the object of securing standards of physical fitness. In the *Assessment of Physical Fitness* (Cassell and Co., 1920) Professor Dreyer and Dr. George F. Hanson explain the method advocated and provide tables. Formulæ connecting body weight with sitting height and each of these measurements with vital capacity are given, and normal standards are assigned. From the purely statistical point of view, the book is not, and does not profess to be, complete, but it suggests a method the statistical study of which cannot fail to provide results worthy of attention.

The Austrian Government has issued a report by Dr. Siegfried Rosenfeld, on "Changes in the Frequency of Tuberculosis in Austria during the War," which contains many interesting analyses. The statistics of mortality from tuberculosis in Austria outside the capital were complicated by the existence of internment camps (the inmates of which died "like flies"), but the following general conclusions appear to be warranted. The increase in tuberculosis was greatest and began soonest in industrial districts; such exceptions as emerged were only apparent exceptions. Thus in the Voralberg the tuberculosis mortality was rather lower in 1918 than in 1916. But the women in this district were in peace time largely employed in home textile industry, associated with a very high incidence of tuberculosis; the change to better paid factory work during the war formed a partial compensation for other and unfavourable effects. In Vienna itself, the deaths of female residents from tuberculosis in 1912 and each of the following years were:

Year.	Deaths from tuberculosis (female residents).	Year.	Deaths from tuberculosis (female residents).
1912	2,725	1916	3,543
1913	2,700	1917	4,469
1914	2,635	1918	4,729
1915	3,004	1919	5,018

In England and Wales the mortality of women from phthisis increased, but in 1919 the age groups 15–20 and 20–25 alone showed a substantially greater death-rate than during the year 1913. In Vienna, on the other hand, there were rather fewer deaths between 15–20 in 1919 than in 1917, but a great many more than in that year at most older ages. Naturally comparisons must be made with hesitation since only the deaths and not populations at ages are available; but Dr. Rosenfeld's general conclusions seem very reasonable.

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In effect, he believes that the war-time and post-armistice increase of mortality from tuberculosis is due to lowering of the general resistance of the body consequent upon over-work, anxiety, lack of food. He suggests that attention to the general factors, rather than concentration upon specific factors, is what is needed.

A paper entitled "The Fall of the Birth-Rate," read by Mr. Udny Yule before the Cambridge University Eugenics Society in May last, and published by the University Press, gives an admirably clear and concise outline of the facts bearing on this subject, and concludes with a short discussion of their interpretation. Avowedly the paper is a recapitulation of material already published, with little or no attempt to add to it; but its value as a convenient and eminently readable summary and criticism of the statistics of the subject, especially, of course, as affecting this country, will appeal to all who take an interest in it. The methods by which the extent of the fall in married fertility can best be measured are described, and its distribution over the various sections of the community is discussed, as well as the change in that distribution which has been shown to have occurred during recent years.

In his interpretation of these facts Mr. Yule is an uncompromising supporter of the view that they are due to natural causes and not to increased use of methods for preventing conception. He makes a point of the fact that fluctuations in fertility are on record which cannot reasonably be ascribed to such methods. No doubt this is so; and in the most remarkable instance of the kind adduced by him—the rise in Connaught fertility after 1881—the fact that Connaught had suffered from famine in 1879 may provide part of the explanation, while the work since then of the Congested Districts Board has also to be borne in mind. The point at issue, indeed, seems not to be whether or no natural fertility is always maintained at a dead level, as suggested in the Johnsonian quotation with which the paper opens—all will admit that it is not—but rather whether the particular movement under discussion, the general fall of fertility during the past forty years, can be ascribed in large measure to the use of preventives. As to this opinions will probably continue to differ for some considerable time, but we may expect that each successive decade will add to the material for forming a definite judgment.

In a paper published in the *Eugenics Review* Dr. M. Greenwood gives the results of an examination of data collected by a Committee of the (First) Birth-Rate Inquiry Commission (National Council of

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Public Morals). The investigation was entrusted to J. W. Brown, M. Greenwood, and the late Frances Wood, but was interrupted in 1915 by the call to war work and the death of the last-named. The paper contains the results agreed to by the three workers.

The first part of the inquiry deals with the effect (if any) of a collegiate education on the fertility of marriage, the necessary data being drawn from 634 schedules of inquiry, including 363 from collegiate women and 136 from non-collegiate. The conclusion arrived at is that "paying attention to the errors of sampling, "there is no difference between the average size of the family of a "non-collegiate mother and that of a collegiate mother which "cannot be explained by differences of age at marriage and duration "of marriage"—which conclusion is held to confirm the opinion of Mrs. Sedgwick that the alleged prejudicial effect on fertility of higher education is non-existent.

The paper deals with the frequency of restriction of fertility in the two groups—practically no difference being found—and with the very important question as to whether the ascertained actual fertility be sufficient to "replace by natural generation the existing "adults of the middle class" of which the women who furnished the data are representatives. On this last point Dr. Greenwood—who takes sole responsibility for the investigation—appears to be uncertain.

One interesting note is made on the filling up of the schedules of inquiry—distinctly formidable in extent. Although the schedules were completed by educated persons, "the number of evidently "incorrect particulars was appreciable."

A report entitled "Illegitimacy as a Child-Welfare Problem," written by Emma O. Lundberg and K. F. Lenroot, and issued by the Children's Bureau of the U.S. Department of Labor, embodies considerable research into the statistics of foreign countries as well as of the U.S.A. Illegitimate births are found to be more numerous in proportion to population in crowded centres than in rural districts, though this excess is partly explicable by the fact that women needing care and attention at the time of maternity are apt to resort to the towns where institutions for such purposes are accessible. Illegitimate infant mortality is higher than legitimate, but appears to be declining in most countries according to the figures given here, which however do not cover the years of recent scarcity due to war; if they did, a considerable rise in infant mortality, both legitimate and illegitimate, would doubtless be shown in many parts of Central and Eastern Europe.

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Birth-registration is still so imperfect in the U.S.A. that statistics for the country as a whole are not fairly comparable with those of European countries, but interesting figures for particular states and cities are given. The concluding chapters are devoted to a sketch of the evolution of methods of guardianship and protection of illegitimate children, by voluntary effort and by the State. The report is set out with ample statistical tables, bibliography, and index.

The United States Government issued, in 1919, a statistical summary of America's contribution to the war, the second edition of which reached this office too late for notice in the July issue of the *Journal*. The report, in 154 octavo pages, is entitled "The War with Germany," and was compiled by Col. Leonard P. Ayres, Chief of the Statistics Branch of the General Staff, in response to a letter from the Secretary for War dated May 10, 1919, asking him to "have prepared "as promptly as possible a brief and simple statistical report showing "what was accomplished by the Department and the co-operating "agencies." The report was despatched on May 31, 1919. The fact that such a summary, covering so many divisions of military activity, could be compiled in less than three weeks, shows that each of the branches concerned must have habitually managed its work by statistical methods. It is now well known that this was, in fact, the case in the armies of all the principal belligerents, and it is also recognised that in the study of war, whether technical or popular, statistical treatment is the base of all sound reasoning. None of the other Governments, however, has at present utilised the existing material for the information of the public and the guidance of students. This little American volume is a true summary; facts and figures are given briefly and plainly; the main points in each chapter are summarized in numbered paragraphs at its close, and these are again summarized in a short table. The maps are clear and helpful, there is an index, and all the principal arithmetical comparisons are exhibited in diagrammatic form. This lavish use of diagram greatly aids comprehension, and some of the diagrams are particularly interesting and ingenious—for instance, No. 28 (p. 70), showing the small arms available each month by curves representing respectively the size of the actual army, the expeditionary force, and of the armies which could have been supplied with the rifles, revolvers, and machine-guns available in each month of the war; the hypothetical army for which machine guns were ready at the date of the Armistice numbering nearly 8 million men instead of the 3 millions odd then under arms or the 2 million in France. On the other hand, some of these downright pictorial assertions might be misleading without

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further knowledge; No. 31 (p. 77), for example, comparing the British and American production of artillery material and ammunition in the first twenty months of war, involves for its interpretation so many considerations that only an expert could safely make deductions from it. The same may perhaps be said of the charts (Nos. 44 and 63) showing the lengths of front (in kilometres and as percentages, respectively) held by the various Allies in 1918, without indicating the density of troops employed. The comparison of the estimated pre-war wealth, with the pre- and post-war debts, of five nations, is another case where no conclusion of much value can be drawn. The ten chapters of the book deal successively with numbers of men, training, transport, food, clothing and equipment, small arms, artillery, aircraft, battles fought, health and casualties, total cost. An appendix consists of diagrams illustrating "Some International Comparisons," among which may be mentioned No. 70, comparing the pre- and post-war sea-going merchant tonnage of the world, the variation in the amounts owned by separate nations or groups being very vividly represented, as well as that in total tonnage.

A section of special interest is that concerned with health and casualties. The battle deaths numbered 50,000 (wounded 206,000), and the deaths from disease 57,500. The magnitude of this figure is of course due to the influenza epidemic of 1918 (83·6 per cent. of the deaths from disease were from pneumonia, meningitis, the next in order, accounting for 4·1 per cent. only), and if the figures are confined to the expeditionary force the battle losses are nearly double those from disease. That is, of each 50 deaths from disease, 30 occurred in the United States. Diagram 54 compares the numbers of disease and battle deaths (per 1,000 troops per annum) in the last four American wars—the Mexican, the Civil War (Federal forces), the Spanish, and the European (expeditionary force only), the disease : battle ratio standing at 110 : 15 in the Mexican war and showing a gradual diminution in the first figure till we have, for the recent war, the corresponding ratio 19 : 53. A comparison of the battle losses of all the belligerents is given on p. 139. Another aspect of the health question is presented in a map (p. 20) showing the percentage of fitness in each state of the Union. This is highest in the middle west —broadly speaking, in the agricultural area, where 70 to 80 per cent. of the drafted men were passed as fit; and lowest (50 to 59 per cent.) in the thickly populated industrial states of the north-east (New York, Maine and Michigan), and also on the Pacific seaboard states, Washington, California, Arizona, and in Colorado, the ratio here being lowered on account of the fine climate which makes these states the resort of invalids.

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The volume will enable people on this side to form a just estimate of the value of the American contribution: a matter about which the general public here is still ill-informed. It must, of course, be remembered that the Americans, coming in two and a half years after the outbreak of war, were able to profit by the experience of their allies. The comparative diagrams at the end, some of which are among the most interesting in the book, incidentally present us with some figures relating to our own effort, which it would be interesting to see amplified on the lines of this summary.

We desire to offer a hearty welcome to the new international journal of statistics, *Metron*, the first number of which has now appeared (the journal is published by Industrie Grafiche Italiane, Rovigno, Italy). The inaugural number contains contributions from such experts as Professors Edgeworth, Czuber and Gini and Messrs. Knibbs and Lucien March; the journal is attractively produced and should form a bond between statisticians of different countries.

The Russian Economist for September-October, 1920, is the first number of a journal in which will be published, in English and in Russian, papers read before the Russian Economic Association in London dealing with problems of Russian economics. Asserting that the supreme need of the restoration of production overrides all political differences, the Society has set itself to collect information regarding present conditions of production in Russia, to investigate the relation of Russian economic life to that of the world, and to examine plans of technical and financial reconstruction.

If the standard set by the papers published in this first number is maintained, the Society may rest assured that it is rendering a considerable service in educating public opinion regarding problems the early solution of which is to all classes of European society only less urgent in degree than it is for their Russian compatriots. This latter point is emphasised in two papers by M. V. Braikevitch on "Russia and the Stability of Europe" and "Politics and Economics of the Russian Problem." In the first paper he points out the danger to production arising from the dislocation of supplies of foodstuffs and raw materials, which threatens not only the relations of the industrial and the agricultural classes in each country but also the stability of the more highly industrialised countries in relation to the rest of the world. The primary task, he says, is immediately to re-establish and develop Europe's own corn production in order to cover, if not completely, at least on the former scale, European needs

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for cereals. In this respect he attaches to European economic unity an importance which is hardly justified by the pre-war figures quoted by himself, and further, the actual and prospective production of cereals to-day shows a considerable improvement on the estimates of March last when the paper was read, but the continued derangement of the mechanism of foreign trade proves that without any overstatement the problem is a very grave one. This is expanded in the second paper referred to above; the pre-war social and economic possibilities of separate countries, as well as their mutual interdependence, and the whole production and distribution of the world have undergone a complete change. To-day international policies are distinguished not as British, American, French or German, but rather as those of countries economically backward or advanced, creditor or debtor countries, self-sufficient or depending on foreign supplies, industrial or agricultural. Foreign policy has lost its former immunity from class struggles within each country; the State has had left to it as a legacy of war-time regulations the responsibility of decision in matters which were formerly settled by the free play of world market price, and thus in all its activities it tends to come under the sway of the dominant party in the economic struggle of labour and capital. The article quotes numerous statistics of national capital, trade, consumption, and currency, which are generally well documented.

Other articles in the present number dealing with the conditions of railway transport in Russia, Russian national debt, and the production of precious metals in Russia, are necessarily of less general interest to the English reader, but they are illuminative of economic conditions in that country, as are also the statistical summaries of output and numbers employed in some of the principal industries under Soviet rule.

A supplementary chapter to the book by Dr. Bowley and Mr. A. R. Burnett-Hurst entitled *Livelihood and Poverty* (1915) dealing with Economic Conditions of Working Class Households in Bolton, 1914, was issued last November. In it Dr. Bowley summarises the results of an enquiry undertaken in the summer of 1914, the tabulation of which, postponed because of the war, was carried out at the London School of Economics and Political Science in 1919–20. In the Bolton investigation the sample taken was of 1 in 10 instead of 1 in 20 as in the four towns (Northampton, Warrington, Stanley and Reading) which were the subject of the previous study, and 3,650 households were covered as against 600 to 700 in the former cases, so that the results may be considered more accurate. In view of the amount of

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work involved in tabulating, however, Dr. Bowley considers that in further investigations of the kind "it will be well to aim at samples "relating to 1,000 households." In the result of the present enquiry the number of persons per household was found to be rather less in Bolton than in the other towns; a larger proportion of the working class population was occupied, the excess being due mainly to the large number of unmarried women and girls employed, while children were fewer in Bolton, the average number per household being 1·1. A table comparing the conditions of Bolton with Mr. Rowntree's and the "New" standard shows that 7·8 per cent. of the households, containing 8 per cent. of the working-class population, were found to be below the latter level.

A study of over 50,000 women workers in different occupations, undertaken by the Minnesota Department of Labor and Industries in 1918, reveals the fact that, according to the standard adopted by the committee, 34 per cent. of all the women considered received less than a minimum subsistence wage. Fifty-six per cent. were found to make some contribution to the support of the family. The standard set up is that a wage below 10 dollars a week should be considered to be below subsistence line; 10 to 14 to constitute a minimum subsistence; 15 to 19 a "normal subsistence"; 20 and over a "normal standard." The precise difference between the two latter classes is not explained. The committee appear to have found it hopeless in the present condition of fluctuating prices to attempt any definite estimate of cost of living expressed in terms of money, and the absence of such an estimate is certainly a defect, though apparently inevitable under the circumstances. The investigation, however, seems to have been thoroughly well planned and thought out, and a great deal of information is conveyed in an easily intelligible manner. The net result is that, according to the standard adopted, "with over a third of the workers receiving less "than a subsistence wage, the effects of the war are not nearly so "obvious as it has been claimed" (page 8), (*i.e.*, have not forced up wages to the extent supposed).

In conclusion, reference is made to the minimum wage law established by statute in Minnesota, July, 1918, but the opinion is expressed that no statutory minimum can be adequate under the existing condition of constantly fluctuating prices. Wage-boards with power to make adjustments in accordance with the cost of essential commodities are more likely to achieve the end of determining and maintaining a fair living wage.

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OBITUARY.

Luigi Bodio.

By the death at Rome, on November 2, of the Commendatore Luigi Bodio, Senator of the Kingdom of Italy, and President of the International Statistical Institute, the Royal Statistical Society has lost from the roll of its Honorary Fellows perhaps the most distinguished of the names there inscribed. Elected as long ago as 1874, the name of Bodio has long been familiar to all active members of our Society, while it may be truly said that statistical Science as a whole must feel itself poorer by the passing of one whose services in many varied capacities, not only to his own country, but to the world at large, have been widely and deservedly recognized. To those who personally enjoyed the privilege of his intimate acquaintance, his death brings a special grief at the loss of so amiable and delightful a colleague. Identified, as Signor Bodio had been since 1885, with the inception and conduct of the International Statistical Institute—first as its Secretary General for more than twenty years, and latterly as its President—it is well to note that his latest effort was directed to a notable endeavour to forward the better organization of the world's statistical work. Only a week or two before his death he had been presiding in Paris at a conference called by the Executive Council of the new League of Nations to consider what steps in that direction might, in the new order of things, be most wisely taken. It is feared that this effort, in his advanced years, was the proximate cause of his lamented decease, which occurred just after his return journey to his native Rome. To set out a catalogue of Signor Bodio's statistical works would be beyond the scope of such a brief obituary notice as the present. The more prominent of his publications are indeed well remembered by active statisticians, and the indices of the Bulletins of the International Institute are largely charged with references to the many subjects with which he dealt over a long series of years. The reconstruction and elaboration of criminal and judiciary statistics, the co-ordination and improvement of emigration records —a subject to which he devoted much administrative attention— and, indeed, all questions of vital and population statistics, were among his more eminent labours. His part in conjunction with Emile Levasseur in compiling the voluminous tables, published by the Institute, of the superficies and population of the States of the

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World, will alone remain a valuable monument of energetic research. His own country had accorded Signor Bodio some years ago the dignity of Senator. He was Honorary President of the Conseil d'Etat at Rome, President of the Italian Superior Council, and President of the Council of Emigration, while his merits were acknowledged by numerous scientific institutions. He was a member of the Royal Academy "dei Lincei," and a correspondent of the Institute of France. Bodio's interests in life extended far beyond the statistical field, and were specially noteworthy in his devotion to art and literature and music. His memory cannot fail to be long cherished affectionately by the members of the International Institute, who owed much to his invariable kindness and courtesy at their several gatherings, and the special favour which his personal influence with his own Government won for the Institute in its early and struggling days, contributed largely to its successful start. Perhaps the feature of his Presidency was less that of prompt decision and control of debates than was marked in the case of some earlier holders of the chair; but in one respect listeners to his many addresses will never forget the charm of his graceful oratory, whether in the beautiful language of his own Italy or in the official French of the Congress discussions. Instances of his gift of felicitous expression will occur to many—such as his earliest speech at the banquet which our own Society gave in London to the founders of the International Institute in 1885, and the striking terms of his remarks, standing in the uncompleted buildings of the "Palace of Peace" at the Hague in 1911, where he dwelt upon the part which the Institute itself might play in the promotion of those good international understandings, through which alone real peace among the nations could be effectively secured. Perhaps the writer of this note may be permitted to add a further tribute to his most recent memory of Bodio as an orator, when, standing, in 1913, in the hall of the present Italian Senate, and before the great picture of the old Senate of Rome which adorns its walls, he recited, in the full resonant tones of the broad original Latin, the speech of Cicero denouncing Catiline.

P. G. Craigie.

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STATISTICAL AND ECONOMIC ARTICLES IN RECENT PERIODICALS.

UNITED KINGDOM—

Accountants' Magazine. August, 1920. — Organisation: *Oliver* (*William*).

Bankers' Magazine—

September, 1920—Progress of Banking in Great Britain and Ireland during 1919. The Future of the Bankers' Clearing House: *Matthews* (*Philip W.*). The Vagaries of gold in War Time: *Lawson* (*W. R.*).

October, 1920 — The Brussels Conference. The Future of Banking—Prize Essay Competition.

November, 1920—Progress of Banking in Great Britain and Ireland during 1919. No. 4. The Brussels Conference—and After. Europe's economic needs. Currency and Exchange after the War.

January, 1921—The Banking Half-Year. National Economy. The Second year after the War.

Biometrika. October, 1920—The Fundamental Problem of Practical Statistics: *Pearson* (*Karl*). Correlation of Cephalic Measurements in Egyptian-Born Natives: *Oreensteen* (*Myer M.*). Notes on the History of Correlation. Being a paper read to the Society of Biometricians and Mathematical Statisticians, June 14, 1920: *Pearson* (*Karl*). On the Inheritance of the Finger Print: *Elderton* (*Ethel M.*). On the Probable Errors of Frequency Constants: Part III.

Department of Agriculture and Technical Instruction for Ireland. Journal No. 3, 1920—Vice-President's Address: *Barrie* (*Mr. Hugh T.*).

East India Association. Journal. October, 1920—The Study of Indian Poverty: *Moreland* (*W. H.*).

Economic Journal—

September, 1920—A Levy on Capital: The Italian Law: *Gini* (*Prof. C.*). The Race for the Chinaman's Nightcap: *Bosanquet* (*Helen*). The Guild Socialists: *Reynard* (*Helene*). Early Price Associations in the British Iron Industry: *Ashton* (*T. S.*). The Theoretical Effects of Rationing on Prices: *Bowley* (*Prof. A. L.*). The Measurement of the Inequality of Incomes: *Dalton* (*Hugh*).

December, 1920—Europe after the Great Wars, 1816 and 1920: *Clapham* (*J. H.*). The Brussels Conference: *Siepmann* (*H. A.*). Some problems of foreign exchange: *Pigou* (*Prof. A. C.*). The Selling and Financing of the American Cotton Crop: *Wyse* (*R. C.*). Currency, Inflation and Price Movements in Australia: *Copland* (*D. B.*). *Notes and Memoranda include:* An Excess Income Tax: *Green* (*R. W.*); Wages According to Family Needs: *Rathbone* (*Eleanor*).

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UNITED KINGDOM—*Contd.*

Eugenics Review—

October, 1920—Some Birth Rate Problems: *Darwin* (*Major Leonard*). The Fertility of the English Middle Classes. A Statistical Study: *Brown* (*J. W.*), *Greenwood* (*Major*) and the late *Wood* (*Frances*).

January, 1921—Some Birth Rate Problems, *contd.* Part II: *Darwin* (*Major Leonard*).

Financial Review of Reviews—

September, 1920—The Effect of Taxation on Securities: *Powell* (*Ellis T.*). Finance and Economics in Italy: *Martin* (*Percy F.*). Internationalism in Industry: *Macara* (*Sir Charles W., Bart.*). Investment Values and Investment Prices.

December, 1920—The Problem of Permanent Industrial Peace: *Henderson* (*The Right Hon. Arthur, M.P.*). The Problem of Permanent Industrial Peace: *Cox* (*Harold*). Canada After the War: *Powell* (*Ellis T.*). Debentures as a Medium for Investment: *Stiles* (*C. R.*). Should the Excess Profits Duty be Abolished?: *Hynes* (*T.*). A National Scheme of Profit-Sharing: *Jordan* (*Herbert W.*). American Competition: Both Sides of the Question: *Good* (*E. T.*).

Institute of Actuaries, Journal. October, 1920—Newton's Interpolation Formulæ. Further Notes: *Fraser* (*Duncan C.*). A Note on Mr. King's method of Graduation and its relation to Graphic Method: *Yule* (*G. Udny*). Actuarial Aspects of Industrial Assurance, with special reference to the Report of the Departmental Committee on the Business of Industrial Assurance Companies and Collecting Societies.

Institute of Bankers, Journal—

December, 1920—Annual Address of the President, *Mr. Walter Leaf.*

January, 1921—Stabilisation of Imperial Exchanges, with Discussion: *Darling* (*J. F.*).

Ministry of Agriculture, Journal—

July, 1920—Forage Crops of Denmark: *Parker* (*W. H.*). Speech by the Minister of Agriculture at the Rothamsted Experimental Station. Pig Feeding and the Cost of Pork Production: *Ruston* (*Arthur C.*). More Wheat: *Hall* (*Sir Daniel, K.C.B.*).

August, 1920—The 1921 Wheat Crop: Britain must grow more: *Middleton* (*Sir Thomas, K.B.E., C.B.*). The Progress of Agricultural Co-operation in England and Wales since the Armistice: *Carr* (*R. H.*). The Work of Agricultural Executive Committees since the Armistice. The Decline in Sheep-Breeding: *Rew* (*Sir Henry, K.C.B.*). Economic Position of the Poultry Industry: *Brown* (*Edward*).

December, 1920—Speech by the Minister of Agriculture at Leicester. The Enclosure of Open-field Farms: *The Right Hon. Lord Ernle.* Milk Recording in England and Wales.

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UNITED KINGDOM—*Contd.*

The Secretary. October, 1920—Profit-Sharing and Production. Profit-Sharing and Labour Co-Partnership.

United Empire. September, 1920—The Government of the British Commonwealth: *Hall* (*Duncan H.*).

INDIA—

Indian Economic Society, Journal—

March, 1920—The Problem of Indian Exchange and Currency: *Basu* (*Praphullachandra*). Report of the Committee on Indian Exchange and Currency, 1919: *Horne* (*E. A.*). Reverse Council Bills: *Madon* (*S. F.*). Preliminary Thoughts on the Efficiency of the Bombay Textile Labour: *H. B. C.* The Economics of Hindu Craft Guilds and Guild Merchants: *Sarkar* (*Benoy Kumar*). The Meston Committee's Report: *Joshi* (*R. M.*). The Place of Co-operation in Economics: *Deole* (*C. S.*).

Indian Journal of Economics. July, 1920—Essentials of Sociology: *Geddes* (*Patrick*). Co-operation and the State: *Strickland* (*C. F.*). Proposed New Economics Course. The Indian Food Problem: *Dubey* (*D. S.*).

Wealth of India. September, 1920—India's Industrial Progress: *Tata* (*Sir Dorab*).

SOUTH AFRICA—

Department of Agriculture, Journal—

May, 1920—The Drought of 1918–19.

June, 1920—Cattle in the Union. Export of South African Eggs and Poultry.

UNITED STATES—

American Academy of Political and Social Science, Annals—

July, 1920—(A series of articles on Industrial Stability, in four sections: I. The Trend towards Industrial Democracy. II. Labor Representation in Industrial Management. III. Collective Bargaining. IV. Securing Production. V. Industrial Stability).

September, 1920—Labor, Management and Production (by various authors): I. The Human factor as the heart of Industry. II. The drift towards science. III. Some major problems. IV. The manager's part.

November, 1920—Social and Industrial Conditions in the Germany of To-day. (This series of papers by various authors includes: Impressions of the Financial and Industrial Conditions in Germany: *Cravath* (*Charles*). The Coal Question in Germany: *Herbig* (*Bergrat Ernst*). Railway Transportation in Germany: *Weirauch* (*Dr.*). Actual Condition and Prospects of Germany's Iron Industry: *Wiedfeldt* (*Otto*). The Cotton Industry in Germany: *Bruck* (*W. F.*). The Main Feature of Germany's Economic and Financial Situation: *Bonn* (*M. J.*). Food Conditions and Agricultural Production: *Huber* (*Dr.*)).

Supplement, December, 1920—Working capital in Street Railway valuation: *Wilcox* (*Delos F.*).

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UNITED STATES—*Contd.*

American Economic Review—

September, 1920—Price Economics versus Welfare Economics: *Fetter* (*Frank A.*). British Income Tax reform: *Comstock* (*Alzada*). The Transportation Act of 1920: *Rich* (*Edgar J.*). Integration in marketing: *Haney* (*Lewis H.*). Interest, rent, and normal return on capital investment in their relation to manufacturing costs: *Howard* (*Stanley E.*). Co-ordination in taxation: *Bowker* (*R. R.*).

December, 1920—Price Economics versus Welfare Economics: contemporary opinion: *Fetter* (*Frank A.*). Circulating credit: Its nature and relation to the public welfare: *King* (*Willford I.*). A "Stabilized Dollar" would produce violent changes in periods of falling prices: *Arbuthnot* (*C. C.*). Suggestions for revision of the Federal Taxation of Income and Profits: *Fairchild* (*Fred Rogers*). *Supplement*—The Taxation of Excess Profits in Great Britain: *Haig* (*Robert Murray*) and *Holmes* (*George E.*).

American Journal of Sociology—

July, 1920—Heredity and Opportunity: *Woods* (*Erville B.*). A Prospectus of Sociological Theory: *Small* (*Albion W.*).

September, 1920—Heredity and Opportunity (*concluded*): *Woods* (*Erville B.*). The Price system and social management: *Rosenberg* (*Edwin J.*).

American Statistical Association, Quarterly Publications—

September, 1920—The Classification of U.S. Statistical Employees: *Meriam* (*Lewis*). A Graphic method for presenting Comparative Cost analyses: *Bonner* (*H. R.*). An Index of Incomes: *Karsten* (*K. G.*). The Measurement of Labor Productivity: *Florence* (*P. Sargant*). Prices during the War: *Stewart* (*Walter W.*). Control Statistics of Coal production and Distribution: *Tryon* (*F. G.*). International Price Indexes: *Snodgrass* (*Katharine*). Statistics of College graduates: *Shaw* (*J. P. Jr.*). The best index of build: *Davenport* (*Charles B.*).

December, 1920—On the study of Displacements within a Population: *Westergaard* (*Harald*). The ability of European Immigrants to speak English: *Bloch* (*Louis*). Industrial class alignments in the United States: *Hansen* (*Alvin H.*). Methods of developing an Index of collection conditions: *Steiner* (*W. H.*). On the costs of Tuberculosis: *Dublin* (*Louis I.*) and *Whitney* (*Jessamine*). The Effects of varying the rate of the Tax on Spirits: *Williamson* (*K. M.*). Second Report of the Advisory Committee on the Census. The mean stature of American males: *Davenport* (*Charles B.*). A new analysis of Personal Income Tax Returns: *Rorty* (*M. C.*).

Journal of Comparative Legislation and International Law—

October, 1920—A new basis for Industrial Corporations: *Taylor* (*J. R. Stirling*). Land Settlement of Ex-Service men in Australia, Canada and the United States: *Hannan* (*A. J.*).

January, 1921—The Legal Status of Illegitimates in the Commonwealth of Australia: (Contributed by Students of the Law School in the University of Melbourne.) America

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UNITED STATES—*Contd.*

Journal of Comparative Legislation and International Law—Contd.

January, 1921—*Contd.*

and the League of Nations: *Pepper* (*George Wharton*). The Constitution and Organisation of the Clearing Office (Enemy Debts): *Charteris* (*Prof. A. H.*). Death Certification: *Glaister* (*John*). Proportional Representation in Modern Legislation: *Williams* (*J. Fischer*).

Journal of Political Economy—

July, 1920—A Functional approach to Social-economic data: *Lyon* (*Leverett S.*). The Federal Reserve Banks' system of par collections: *Preston* (*Howard H.*). Are Stock dividends Income?: *Zukerman* (*T. David*). The political progress of the English working-man. II: *Read* (*Conyers*).

October, 1920—Harmonizing the interests of Farm Producer and Town Consumer: *Nourse* (*E. G.*). International private agreements in the form of Cartels, Syndicates, and other Combinations: *Notz* (*William*). Interest during construction: *Paton* (*W. A.*).

November, 1920—Incentive and Output: A statement of the place of the Personal Manager in Modern Industry: *Marshall* (*L. C.*). The teaching of Economics again: *Wolfe* (*A. B.*). Painless Socialization in Holland: *Kayden* (*Eugene M.*). Labor Conditions in Soviet Russia: *Hewes* (*Amy*). Thrift and the Standard of Living: *Carver* (*T. N.*).

December, 1920—Seasonal Problems in Financial Administration: *Copeland* (*Morris A.*). Commercial Credit or Discount Companies: *Moulton* (*H. G.*). The Labour Situation in Detroit: *Watkins* (*Myron W.*).

Political Science Quarterly—

September, 1920—Why the War came as a surprise: *Hobson* (*J. A.*). The Constitution of the Peace Conference: *Slosson* (*Preston*). The coldward course of progress: *Gilfillan* (*S. C.*).

December, 1920—A System of Federal Grants-in-Aid. II: *Douglas* (*Paul H.*). Reform in India: *Houghton* (*Bernard*). Coal Nationalisation in England: *Hart* (*H. McB.*). Mobility of Labor: *Brissenden* (*Paul F.*) and *Frankel* (*Emil*).

Quarterly Journal of Economics—

August, 1920—The American Merchant Fleet: A War achievement, a Peace problem: *Day* (*Edmund E.*). The Report of the Royal Commission on the British Income Tax: *Pigou* (*A. C.*). The Meat-packing Investigation: *Virtue* (*G. O.*). The accuracy of labor: *Kotany* (*L.*). The Grain Corporation and the guaranteed Wheat price: *Eldred* (*Wilfred*). The transition from Government Control of Sugar to competitive conditions: *Bernhardt* (*Joshua*).

November, 1920—Saver's surplus and the Interest rate: *Wolfe* (*A. B.*). Industrial Morale: *Slichter* (*Sumner H.*). The British Coal Industry and the Question of Nationalisation: *Tawney* (*R. H.*). Taxes on Property and Property Increments in Italy: *Einaudi* (*Luigi*). Ross's Principles of Sociology: *Carver* (*T. N.*).

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UNITED STATES—*Contd.*

Review of Economic Statistics—

July, 1920—Business and financial conditions following the Civil War in the United States: *Persons* (*Warren M.*), *Tuttle* (*Pierson M.*) and *Frickey* (*Edwin*). Review of the Second Quarter of the Year: *Bullock* (*Charles J.*). The world's gold supply: *Berridge* (*William A.*).

August, 1920—World Banking and Currency: A review of recent developments: *Davis* (*Joseph S.*).

September, 1920—An Index of the physical volume of production. I. Agriculture, 1879–1920: *Day* (*Edmund E.*).

October, 1920—An Index of the physical volume of production. II. Mining, 1879–1919: *Day* (*Edmund E.*).

November, 1920—An Index of the physical volume of production. III. Manufacture, 1899-1919: *Day* (*Edmund E.*) and *Persons* (*Warren M.*).

December, 1920—World Currency and Banking: The First Brussels Financial Conference: *Davis* (*Joseph S.*). An Index of the physical volume of production. III. Manufacture, 1899–1919 (*concluded*): *Day* (*Edmund E.*).

FRANCE—

Bulletin de Statistique et de Législation Comparée—

May, 1920—La situation financière (suite et fin.) en Italie. La situation des principaux instituts d'émission pendant la guerre.

June, 1920—Relevé des opérations des bureaux de garantie en 1919. Grèce. Les finances du Royaume pendant la guerre.

July, 1920—La production des vins et des cidres en 1919. La situation des principaux instituts d'émission à la fin du 2e trimestre de 1920. Italie. La réforme des impôts directs et des contributions locales.

Bulletin du Ministère du Travail. May–June–July, 1920—Enquête sur l'activité des établissements industriels et commerciaux en janvier 1920 (suite et fin.). L'Industrie charbonnière en France en 1918.

Journal des Économistes—

July, 1920—La Réforme des chemins de fer: *Yves-Guyot.* Le Prôjet de finance britannique (1920): *Williams* (*W. M. J.*). La Détermination des prix en temps de crise de sous-production: *Doucet* (*Robert*). Le Procès du capital: *Raffalovich* (*Arthur*).

October, 1920—L'Endosmose bolchévique: *Yves-Guyot.* L'Enquête monétaire de la Société des Nations: *Raffalovich* (*Arthur*). Note complémentaire sur l'emprunt français en rentes amortissables 5 p. 100. (1920): *Barriol* (*A.*) et *Brochu* (*I.*). Les Comptes des chemins de fer de l'État en 1918: *Nouvion* (*Georges de*). La Lutte contre le socialisme en Angleterre: *A. B.*

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FRANCE—*Contd.*

Journal des Économistes—Contd.

November, 1920—La Grève des mineurs dans la Grande-Bretagne: *Yves-Guyot*. La Conférence financière internationale de Bruxelles (24 septembre–8 octobre 1920): *Raffalovich* (*Arthur*). La Nationalisation de la marine marchande: *Mondet* (*N.*). Le Nouveau Régime des chemins de fer et le Rapport de M. Henri Lorin: *Viator*. Notes sur l'Irlande économique: *Un Rural*.

Journal de la Société de Statistique de Paris—

July–August–September, 1920—Les cadres de la statistique du coût de la guerre: *Faure* (*Fernand*). Statistique des facteurs qui ont modifié le taux de l'intérêt de 1869 à 1914: *Mourre* (*M. le baron*). Les émissions et remboursements d'obligations des grandes compagnies de chemins de fer en 1919: *Neymarck* (*Alfred*). Réorganisation de la statistique roumaine.

October, 1920 — Quelques chiffres à propos des élections législatives françaises de 1919: *Dewavrin* (*Maurice*). Chronique de démographie: *Huber* (*Michel*). Chronique des banques et des questions monétaires: *Roulleau* (*Gaston*).

November, 1920—Annexe au procès-verbal de la séance du 20 octobre 1920: La valeur immobilière du territoire français envahi (guerre 1914–1918) (fortune privée) et la reconstitution des régions libérées: *Michel* (*M.*). Les changes mondiaux à Paris pendant la deuxième semaine de février 1920: *Dewavrin* (*Maurice*). La situation financière du Japon en 1919: *Girard* (*J.*).

December, 1920—Les établissements de crédit en France: *Neymarck* (*M. Alfred*). La mobilisation des valeurs étrangères en Angleterre: *Dubern* (*M. Eugène Boislandry*).

La Réforme Sociale—

September–October, 1920—Les Colonies et le relèvement économique de la France: *de Byans* (*Vernier*). Le Problème de la Valeur et l'Economie pure, d'après les théories actuelles: *Clement* (*Henri*). Le Mouvement Économique et Social—Allemagne, Autriche, Hongrie: *Blondel* (*Georges*).

November, 1920—Le Problème de la Valeur et l'Economie pure, d'après les théories actuelles: *Clément* (*M. Henri*).

December, 1920—La Famille et la Fiscalité: *XXX*. La Problème de la Valeur et l'Economie pure, d'après les théories actuelles: *Clément* (*M. Henri*).

Revue de l'Institut de Sociologie. July, 1920—Réflexions sur l'après-guerre. Vers quoi tend le monde économique?: *Lescure* (*J.*).

Revue d'Economie Politique—

July–August, 1920—La monnaie dans la nouvelle République autrichienne: *X*. Le Problème des nationalisations et le "Guild Socialism" en Angleterre: *Laskine* (*Edmond*). Quelques considérations sur le mercantilisme: *Gonnard* (*René*). L'inégalité devant la mort, d'après les statistique de la ville de Paris: *Hersch* (*L.*).

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FRANCE—*Contd.*

Revue d'Economie Politique—Contd.

September–October, 1920—La situation monétaire de la Roumanie. Régime sous l'occupation ennemie et état actuel: *Gheorghiu* (*Démètre J.*). Le système dit "d'économie mixte," dans les entreprises publiques en Allemagne: *Kaeppelin* (*Roger*). La guerre et les ouvrières britanniques: *Puech* (*Marie-Louise*). Allocations pour charges de famille et caisses de compensation: *Richemond* (*P.*). Le morcellement parcellaire en France: *Girault* (*Arthur*).

ITALY—

Giornale degli Economisti e Rivista di Statistica—

July, 1920—Classificazione generale dei problemi principali della finanza: *Sensini* (*Guido*). L'Impiego privato nell'Economia nazionale: *Angrisani* (*Giovanni*). Discussione sul disegno di prestito forzoso: *Griziotti* (*Benvenuto*).

September, 1920—Solidarieta economica e concorrenza commerciale fra gli stati: *Turroni* (*C. Bresciani*).

October, 1920—Ulteriori Classificazioni dei Problemi Principali Della Finanza: *Sensini* (*Guido*). Gli Odierni Aspetti Dell'Economia dei Trasporti: *di Nola* (*Carlo*).

Giornale di Matematica Finanziaria. March–June, 1920—Le discussioni tecniche sull'imposta patrimoniale: *Borgatta* (*G.*). Ancora sull'assicurazione obbligatoria contro la invalidita e la vecchiaia: *Insolera* (*F.*). Il bilancio dello Stato: *Curato* (*G.*). Sull'ammortamento americano in generale: *Insolera* (*F.*).

La Riforma Sociale—

July–August, 1920—Gli aspetti economico-statistici del problema della carne congelata: *Zingali* (*Gaetano*). L'Espropriazione delle terre incolte e mal coltivate in Sicilia: *Crimi* (*G. Navarra*). L'Urgente problema del servizio statistico doganale: *Presicci* (*Nino*).

September–October, 1920—I Sumeri–indici "Necco" per il 1917 ed il 1918: *Garino-Canina* (*Attilio*). Di una proposta del Rignano per la Riforma del Diritto Ereditario e dell'Imposta Successoria: *Rotondi* (*Mario*). Il "Deficit" sistematico nell'Assicurazione Obbligatoria Italiana Contro l'Invalidità e la Vecchiaia: *Insolera* (*F.*).

November–December, 1920—Il Problema monetario Fiumano: *Rosboch* (*Ettore*). Note sulle Finanze dell' Austria nel periodo Bellico e post-Bellico: *Garino-Canina* (*Attilio*).

Rivista Italiana di Sociologia. January–March, 1920—Preliminari a uno studio quantitativo della civiltà a del progresso: *Niceforo* (*A.*).

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LIST OF ADDITIONS TO THE LIBRARY.

Since July, 1920, the Society has received the publications enumerated below.

I. OFFICIAL PUBLICATIONS.

(a) United Kingdom and its several Divisions.

United Kingdom—

Foreign Office. Handbooks prepared under the Historical Section. 57. Mohammedan History. 58. Turkey in Asia. 59. Anatolia. 60. Syria and Palestine. 64. Islands of the Northern and Eastern Ægean. 67. China. 68. Mongolia. 69. Manchuria. 70. Tibet. 71. Kiao-chow and Weihaiwei. 73. Japan. 74. Siam. 153. The Congress of Vienna, 1814–1815. 154. The Congress of Berlin, 1878. 155. German Opinion on National Policy Prior to July, 1914, Part I. 156. Part II. 157. German Opinion on National Policy since July, 1914. 158. Indemnities of War: Subsidies and Loans. 159. Plebiscite and Referendum. 160. Schemes for Maintaining General Peace. 161. President Wilson's Policy. 162. Zionism.

96. Kenya, Uganda and Zanzibar. 97. British Somaliland and Sokotra. 98. Anglo-Egyptian Sudan. 99. Belgian Congo. 100. French West Africa. 101. French Morocco. 102. Senegal. 103. French Guinea. 104. Ivory Coast. 105. Dahomey. 106. Mauretania. 107. Upper Senegal and Niger. 108. French Equatorial Africa. 109. French Somaliland. 152. European Coalitions, Alliances and Ententes since 1792. 151. International Congresses. 150. International Canals. 149. International Rivers. 148. The Freedom of the Seas.

61. Arabia. 62. Armenia and Kurdistan. 63. Mesopotamia. 64. Islands of the Northern and Eastern Ægean. 65. Cyprus. 66. France and the Levant. 76. Persian Gulf. 77. French Possessions in India. 78. French Indo-China. 79. Portuguese Possessions in India. 80. Portuguese Timor. 81. Macao. 82. Java and Madura. 83. Sumatra. 84. Dutch Borneo. 85. Celebes. 86. Dutch Timor and the Lesser Sunda Islands. 87. Dutch New Guinea and the Molucca Islands. 88. British New Guinea (Papua). 115. The Formation of the Portuguese Colonial Empire. 116. Azores and Madeira. 117. Cape Verde Islands. 118. Portuguese Guinea. 119. San Thomé and Principe. 120. Angola (including Cabinda). 121. Mozambique. 131. Saint-Pierre and Miquelon. 132. Greenland. 133. British Honduras. 134. Introduction to the Guiana Colonies. 135. British Guiana. 136. Dutch Guiana. 137. French Guiana. 138. Falkland Islands, Kerguelen.

89. Partition of Africa. 90. British West Africa (General). 91. Gambia. 92. Sierra Leone. 93. Gold Coast. 94. Nigeria. 95. Nyasaland. 110. Togoland. 111. Cameroon. 112. South-West Africa. 113. Tanganyika (German East Africa). 114. Treatment of Natives in the German Colonies. 122. Spanish Morocco. 123. Canary Islands. 124. Spanish Sahara. 125. Spanish Guinea. 126. Eritrea. 127. Italian Libya. 128. Italian Somaliland. 129. Abyssinia. 130. Liberia. 139. Discoveries and Acquisitions in the Pacific. 140. Galapagos and Juan Fernandez Islands. 141 and 142. Malpelo, Cocos, and Easter Islands. 144. British Possessions in Oceania. 145. French Possessions in Oceania. 146. Former German Possessions in Oceania. 147. New Hebrides.

Ministry of Agriculture and Fisheries. Fishery Investigations—Series II. Sea Fisheries. Vol. IV, No. 5. The Exploration of Lousy Bank. 12 pp., fol. Series III. Hydrography. Vol. I. The English Channel. Part V. The Section from Plymouth to Brest. 19 pp., fol. London, 1920. (The Ministry.)

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(a) **United Kingdom and its several Divisions**—*Contd.*

United Kingdom—*Contd.*

Ministry of Health. First Annual Report, 1919–20, in 4 parts, 1920. (The Ministry.) Reports on Public Health and Medical Subjects. No. 3. The Progress and Diffusion of Plague, Cholera and Yellow Fever throughout the World, 1914–17. xv + 276 pp. London, 1920. (The Ministry.)

Channel Tunnel. House of Commons Committee. Report of Meeting, 5th July, 1920. (Protest against Delay of Work: Support of Labour Party.) Deputation to P.M., 12th November, 1919. Reply to Mr. Lloyd George. 30 pp., London (privately printed, 1920). (Sir A. Fell.)

Medical Research Council and Department of Scientific and Industrial Research. First Annual Report of the Industrial Fatigue Research Board to 31st March, 1920. 31 pp. London, 1920. (The Council.)

Scotland—

Board of Agriculture for Scotland. Interim Report to the Board on the Economics of Small Farms and Small Holdings in Scotland. (For official use.) 98 pp. Edinburgh, 1919. (Mr. H. M. Conacher.)

Scottish Education Department. Secondary Education (Scotland). Leaving certificate examination. Examination papers, 1920. 89 pp. London, 1920. (The Department.)

(b) **India and Dominions.**

India—

Imperial Library. Catalogue, Part I, Vols. I and II. Calcutta, 1917–18. (India Office.)

Saharanpur—Supplementary notes and statistics to Vol. II of the District Gazetteers of the United Provinces of Agra and Oudh. 1 vol. Allahabad, 1917. (*Id.*)

Gazetteer of the Province of Sind. 7 vols. Bombay. (*Id.*)

Australia—

Commonwealth Bureau of Census and Statistics—

Transport and Communication. Bulletin No. 11. Summary of Commonwealth Statistics of Transport and Communication for the years 1909 to 1919. (*G. H. Knibbs.*) 60 pp., fol. Melbourne, 1920. (The Bureau.)

Finance. Bulletin No. 11. Summary of Australian Financial Statistics, 1909–10 to 1918–19. (*G. H. Knibbs.*) 92 pp., fol. Melbourne, 1920. (*Id.*)

Population and Vital Statistics. Bulletin No. 37. Commonwealth Demography, 1919, and previous years. 253 pp., fol. Melbourne, 1920. (*Id.*)

Labour and Industrial Branch Report No. 10. Prices, Purchasing-Power of Money, Wages, Trade Unions, Unemployment, and General Industrial Conditions, 1919. (By *G. H. Knibbs.*) 214 pp. Melbourne, 1920. (*Id.*)

W. Australia—Department of Mines. Report on the Manganese Deposits at Horseshoe Range, Peak Hill Goldfield. By *A. Montgomery*, State Mining Engineer. 31 pp. Perth, 1920. (The Department.)

New South Wales—Extract from the Report of the Director-General of Public Health, N.S.W., 1919. Section V. Report on the Influenza Epidemic in New South Wales in 1919. 140–272 pp., fol. Sydney, 1920. (The Government Statistician.)

Canada—

Department of the Interior. Natural Resources Intelligence Branch—
Natural Resources of Nova Scotia. 71 pp. Ottawa, 1920.
Central British Columbia. 119 pp. 1920. (The Department.)

Department of Labour. Information Respecting the Russian Soviet System and its Propaganda in North America. 18 pp. 1920. (The Department.)

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(b) **India and Dominions**—*Contd.*

Canada—*Contd.*

Dominion Bureau of Statistics—

Census of Industry, 1918. Dairy Factories, 1918. xi + 120 pp. Ottawa, 1920. (The Bureau.)

The Coal Situation in Canada, September, 1920. (By *S. J. Cook.*) 5 pp., fol. Ottawa, 1920. (The Author.)

The Paint and Varnish Industry in Canada in 1918. Advance chapter of "Chemicals and Allied Products in Canada in 1918." (Prepared under the direction of S. J. Cook.) 5 pp., fol. Ottawa, 1920. (*Id.*)

The Starch and Glucose Industry in Canada since 1918. Advance chapter of "Chemicals and Allied Products in Canada in 1918." (Prepared under the direction of S. J. Cook.) 3 pp., fol. Ottawa, 1920. (*Id.*)

Finance Division. Municipal Statistics. Report on Cities and Towns having a population of 10,000 and over. 57 pp. Ottawa, 1920. (The Bureau.)

New Zealand—

Census and Statistics Office. Report on the Results of a Census of the Population of the Dominion of New Zealand taken for the night of the 16th October, 1916. viii + 183 pp., fol. Wellington, 1920. (The Census Office.)

Prices. An Inquiry into Prices in New Zealand, 1891–1919. (Prepared by Malcolm Fraser.) vi + 191 pp. Wellington, 1920. (The Census and Statistics Office.)

Union of South Africa—

Census of the European of White Races, 1918. Part IV. Conjugal Condition. VI. Religions. VII. Birthplaces. 3 vols., fol. (The Union Government.)

Department of Agriculture—

Bulletin No. 1, 1920. The Composition of Natal Wattle Bark. (Third article.) By *C. O. Williams.* 14 pp. Pretoria, 1920.

—— 4, 1920. The Wool Industry. By *B. G. L. Enslin.* 60 pp. Pretoria, 1920.

Science Bulletin No. 12. Preliminary Studies on some Fungi and Bacteria responsible for the Deterioration of South African Sugars. By *Paul A. van der Bijl.* 32 pp. Pretoria, 1920.

—— 15. The South African Locust Poison. By *Ernest Anderson.* 18 pp. Pretoria, 1920. (The Department.)

(c) **Foreign Countries.**

Austria—

Staatsamt für Handel und Gewerbe. Industrie und Bauten—

Statistik des Bergbaues für das Jahr 1915. Die Gebarung und die Ergebnisse der Krankheits-, Mortalitäts- und Invalidaditätsstatistik der Bergwerksbruderladen im jahre 1914. 117 pp. Wien, 1919. (The Austrian Government.)

—— fur das Jahr 1916. Betriebs- und Arbeiterverhältnisse beim bergbau Naphthastatistik. 205 pp. Wien, 1919. (*Id.*)

Statistische Zentralkommission—

Statistisches Handbuch. I. Jahrgang. iv + 87 pp. Wien, 1920. (Stat. Zentralkommission.)

Statistik der Banken in den im Reichsrate vertretenen Königreichen und Ländern für die jahre 1907 bis 1911. 35 + 99 pp. Wien, 1914. (*Id.*)

Statistik der Sparkassen in den im Reichsrate vertretenen Königreichen und Ländern für das jahr 1912. 42 + 118 pp. Wien, 1915. (*Id.*)

Statistik des Sanitätswesens für das jahr 1913. 3 + 108 pp. Wien, 1917. (*Id.*)

Statistik der Unterrichtsanstalten für das jahr 1911–12. 30 + 298 pp. Wien, 1916. (*Id.*) 1912–1913. 35 + 344 pp. Wien, 1917. (*Id.*) 1913–14. 6 + 180 pp. Wien, 1919. (*Id.*)

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(c) **Foreign Countries**—*Contd.*

Austria—*Contd.*

Statistische Zentralkommission—*Contd.*

Statistik der Banken für die jahre 1912 und 1913. 3 + 49 pp. Wien, 1916.

(*Id.*) 1914 und 1915. 3 + 61 pp. Wien, 1918. (Stat. Zentral kommission.)

Statistik der Sparkassen für das jahr 1913. 8 + 118 pp. Wien, 1916. (*Id.*)

Bewegung der Bevölkerung Österreichs im jahre 1913. 84 + 276 pp. Wien, 1918. (*Id.*)

Kriminalstatistik, 1911. 7 + 339 pp. Wien, 1914. (*Id.*)

—— 1912. 7 + 340 pp. Wien, 1916. (*Id.*)

Der Österreichische Staatshaushalt in dem Jahrzehnt 1903 bis 1912. 52 + 55 pp. Wien, 1915. (*Id.*)

Tafelwerk zur Österreichischen Justiz Statistik. Ein Quellenwerk für Justizstatistische Forschungen, 1911. 13 + 528 pp. Wien, 1914. (*Id.*)

—— 1912. 13 + 528 pp. Wien. 1915. (*Id.*)

Berufsstatistik nach den Ergebnissen der Volkszählung vom 31 Dezember 1910 in den im Reichsrate Vertretenen Königreichen and Ländern. 10 vols. Wien. (*Id.*)

Bewegung der Bevölkerung der im Reichsrate Vertretenen Königreiche und Länder im jahre 1912. 42 + 159 pp., and maps. Wien, 1915. (*Id.*)

Statistik der Unterrichtsanstalten in den im Reichsrate Vertretenen Königreichen und Ländern für das jahr 1910–11. 29 + 306 pp. Wien, 1914. (*Id.*)

Statistik des Sanitätswesens in den im Reichsrate Vertretenen Königreichen und Landern für das jahr 1911. 3 + 118 pp. Wien, 1914. (*Id.*)

—— 1912. 3 + 118 pp. Wien, 1915. (*Id.*)

Vorläufige Ergebnisse der Ausserordentlichen Volkszählung vom 31 Jänner 1920 nebst Gemeindeverzeichnis. Beiträge zur Statistik der Republik Osterreich, 5 heft. 24 + 136 pp. Wien, 1920. (*Id.*)

Beiträge zur Statistik Deutschösterreichs. 4 vols. Wien, 1919–20. (*Id.*)

Ergebnisse der Volkszählung vom 31 Dezember 1910 in Österreich. 4 vols. Wien, 1917–18–19. (*Id.*)

Die Ergebnisse der Volkszählung vom 31 Dezember 1910 in den im Reichsrate Vertretenen Königreichen und Ländern. 4 vols. Wien, 1914 (*Id.*)

Belgium—

Ministère de l'Industrie, du Travail et du Ravitaillement—

Statistique des Accidents du Travail, année 1908. x + 409 pp. Année 1909. vii + 419 pp. Bruxelles, 1920. (Ministère de l'Industrie.)

Le Travail Industriel aux États-Unis. Rapports de la Mission d'Enquête. 2 vols. Bruxelles, 1920. (*Id.*)

L'Enquête sur les prix de détail en Belgique. Construction d'un Index Alimentaire Pondéré. (Extrait de la Revue du Travail des 15–31 octobre 1920.) 20 pp. (*Id.*)

Bulgaria—

Statistique Agricole, année 1912. 345 pp., 4to. Sophia, 1919. (Direction Générale de Statistique.)

Statistique du Commerce pendant l'année 1912. 445 pp., 4to. Sophia, 1919. (*Id.*)

Statistique des Fonctionnaires et Employés, vers le 1er avril 1911. 189 pp. Sophia, 1918. (*Id.*)

Mouvement de la Population, pendant l'année 1910. 273 pp., 4to. Sophia, 1916. (*Id.*)

—— pendant l'année 1911. 120 pp., 4to. Sophia, 1919. (*Id.*)

Recensement du Bétail au 31 decembre 1920. Vol. I. Résultats Généraux 273 pp., 4to. Sophia, 1918. (*Id.*)

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(c) **Foreign Countries**—*Contd.*

Czechoslovakia—
L'Office de Statistique d'Etat. Manuel Statistique de la République I. 8 + 106 + 6 pp. Prague, 1920. (The Office.)

Denmark—
København—
Tabelvaerk til Københavns Statistik Nr. 20. Tabellarisk Fremstilling af Ejendoms-, Beboelsesog Husleje-Forholdene for København, Frederiksberg og Gentofte Kommuner. 65 pp. København, 1918. (Kommunalbestyrelses Foranstaltning.)
—— Nr. 21. Tabellarisk Fremstilling af Bevolkningens Fordeling efter Køn og alder, Civilstand og Trossamfund samt efter Fødesteds-og Erhvervsforhold for København, Frederiksberg og Gentofte Kommune. 25 + 80 pp. København, 1919. (*Id.*)
Statistiske Oplysninger om København og Frederiksberg 1913–1917. xvi + 277 pp. København, 1919. (Københavns Statistiske Kontor.)

Egypt—
Census of Egypt taken in 1917. Vol. I. Village Returns showing the Area, Density, Number of Occupied Dwellings, Sex, Religion, Civil Status, Literacy and Blindness. 377 pp., fol. Cairo, 1920. (The Department.)
Report on Cost of Living. (Supplement to "Monthly Agricultural Statistics," November, 1920.) By *T. L. Bennett.* 10 pp., and tables, fol. Cairo, 1920. (*Id.*)

Finland—
Central Statistical Bureau. An Economic and Financial Survey. 76 pp., and maps. Helsingfors, 1920. (The Consul-General in London.)

France—
Chambre des Députés. No. 633. Sessions de 1920. Proposition de Résolution tendant à charger la commission de l'armée d'établir et de faire connaitre le bilan des pertes en morts et en blessés faites au cours de la guerre par les Nations Belligérantes présentée par M. Louis Marin. 195 pp. Paris, 1920. (M. Lucien March.)
Seine—Office Départemental du Placement et de la Statistique du Travail. Le Fonctionnement de l'Office Departemental du 1er novembre 1918 au 31 decembre 1919. 363 pp. Paris. 1920. (The Office.)
Annuaire Statistique de la Ville de Paris, 1914. xxxii + 595 pp. Paris, 1920. (Préfecture de la Seine.)

Germany—
Statistisches Amt der Stadt Berlin. Statistisches Jahrbuch der Stadt Berlin, enthaltend die Statistik der Jahre 1912 bis 1914 sowie Teile von 1915. xx + 1211 pp. Berlin, 1916. (Statistisches Amt.)
Statistik des Deutschen Reichs, Band 266. Bewegung der Bevölkerung im Jahre 1912. 52 + 183 pp., fol. Berlin, 1916. (General Register Office, Somerset House.)
Statistisches Reichsamt. Statistisches Jahrbuch für das Deutsche Reich, 1919. xxxiv + 358 + 68 + 32 pp., and charts. Berlin, 1919. (Statistisches Reichsamt.)

Italy—
Ministero per il Lavoro e la Providenza Sociale. Statistica della Emigrazione Italiana per l'Estero, negli anni 1916 e 1917, e dati sommari per il 1918. xxxvi + 163 pp. Roma, 1920. (Ufficio Centrale.)
Milano—Ufficio del lavoro e della Statistica—
Il Contratto Collettivo di Lavoro per le Aziende Industriali. 84 pp. Milano, 1920. (Municipio di Milano.)
Le Variazioni dei Salari in Rapporto al Rincaro della Vita. II. edizione. 143 pp. Milano, 1920. (*Id.*)
I prezzi dei generi alimentari in Milano dal 1798 al 1918. 89 pp. Milano, 1919. (*Id.*)

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(c) **Foreign Countries**—*Contd.*

Netherlands—

Bijdragen tot de statistiek van Nederland. No. 292. (April, 1920)—

Statistiek van de Voortbrenging en het Verbruik de Nederlandsche Nijverheid in 1913 en 1916. 124 pp. 's-Gravenhage. 1920. (Bureau central de statistique.)

—— No. 297. (July, 1920.)

Statistiek van de loonen en den arbeidsduur der volgens de Ongevallenwet 1901 ver ekerde werklieden in de gasfabrieken en de electriciteitsfabrieken in het jaar 1918. xxiv + 8 pp. 's-Gravenhage, 1920. (*Id.*)

Amsterdam—Statistique de la Ville d'Amsterdam, 10 October, 1894–1919. 60 pp. (Bureau van Statistiek.)

Norway—

Alkoholstatistik 1918-19. 62 + 49 pp. Kristiania, 1920. (Bureau central de statistique.)

Kommunevalgene 1919. 18 + 40 pp. Kristiania, 1920. (*Id.*)

Behandlingen av Forsømte Barn Vergerådenes Virksomhet, Skolehjem og Tvangsskoler (Lov av 6 Juni 1896) 1914 og 1915. 71 pp. Kristiania, 1920. (*Id.*)

Kvinners Natarbeide, en Socialstatistik Undersokelse. 56 pp. Kristiania, 1920. (Social Departementet).

Arbeidstiden i Anleggs- og Byggevirksomheter Lager og Transportbedrifter og i Sten- og Jordindustrien. 58 pp. Kristiania, 1920. (*Id.*)

Ulykkes-forsikringen for Industriarbeidere M.V. 1917. 95 pp. Kristiania, 1920. (Riksforsikringsanstalten.)

Konferensen angående Arbeidsledighetsstatistiken. 1920. 35 pp. Kristiania. (Bureau central de statistique.)

Prussia—

Preussisches Statistisches Landesamt—

Zeitschrift des Preussischen Statistischen Landesamts, 1919. 322 + 40 pp. fol. Berlin, 1920. (The Bureau.)

Preussisches Statistik. (Amtliches Wellenwerf.) 259. Monats- und Jahrespreise wichtiger Lebens und Verpflegungsmittel einschliesslich lebenden Viehs in Preussen, im Jahre 1918. 9 + 129 pp., fol. Berlin, 1920. (*Id.*)

Roumania—

Statistica Gladirilor si a Locuintelor din Romania. Intocmita de Baza Recensamantului General al Populatiunii din 19 Decembre 1912–1 Januarie 1913. 89 pp., fol. Bucuresti, 1920. (Directiunea Generala.)

Ministère de l'Industrie et du Commerce—

Statistique Judiciaire de la Roumanie pour les années 1912, 1913 et 1914. xx + 155 pp. Bucuresti, 1920. (Direction Generale.)

Statistica Miniera a Romaniei pe annii 1913–14—1915–16. 207 pp. Bucuresti, 1920. (*Id.*)

Sweden—

Arbetstiden inom Industri och Hantverk mm. i Sverige vid ar 1917. 157 + 146 pp. Stockholm, 1920. (K. Socialstyrelsen.)

De Ideella Foreningarna i Sverige och deras Ekonomiska Forhallanden ar 1917. viii + 45 pp. Stockholm, 1920. (*Id.*)

Olycksfall i Arbete, år 1916. vi + 67 pp. Stockholm, 1920. (*Id.*)

Statens Forlikningsmans formedling i arbetstvister Verksamhet. år 1918. 94 pp. Stockholm, 1920. (K. Universitets Bibliotek, Uppsala.)

—— Jordbruk med Binaringar.

Mejerihantering, ar 1918. viii + 53 pp. Stockholm, 1920. (Bureau central.)

Brottsligheten, aren 1913 och 1914. viii + 173 pp. Stockholm, 1920. (*Id.*)

Befolkningsrørelsen, år 1916. vi + 72 + 70 pp. Stockholm, 1920. (*Id.*)

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(c) **Foreign Countries**—*Contd.*

Sweden—*Contd.*

Allmän Järnvägsstatistik; statistiskt sammandrag för åren 1881–1915. Bihang till Allmän Järnvägsstatistik år 1915. vi + 123 pp. Stockholm, 1920. (Bureau central.)

Arealinventeringen och Husdjursrakningen den 1 Juni 1919. 81 pp. Stockholm, 1920. (*Id.*)

Utländskt Statistiskt o.d. Tryck förvärvat år 1916 av Sveriges Offentliga Bibliotek. 469–568 pp. Stockholm, 1918. (Service municipal de la Statistique de Stockholm.)

Stockholms Stads Statistik. X. Specialundersökningar 10. Stockholms Kommunalstatistik 1868–1918. Några Minnesord av J. Guinchard. 50 + 7 pp. Stockholm, 1920. (*Id.*)

Switzerland—

Bulletin de statistique suisse. Salaires payés en 1918 aux ouvriers victimes d'accidents survenus dans les entreprises soumises à la loi fédérale sur l'assurance en cas d'accidents. 1920. (IIième année.) 27 + 96 pp. Berne, 1920. (Bureau federal.)

Uruguay—

Anuario de Estadistica Agricola, ano 1918–19. xliv + 315 pp. Montevideo, 1920. (Oficina de Estadistica.)

United States—

Department of Commerce. Bureau of the Census—

Census of Electrical Industries, 1917. Electric Railways. Telephones. Central Electric Light and Power Stations with Summary of the Electrical Industries. 3 vols. Washington, 1920. (The Bureau.)

Cotton Production and Distribution. Season of 1918–19. 135 pp. Washington, 1919. (*Id.*)

Financial Statistics of States, 1919. 119 pp. Washington, 1920. (*Id.*)

Religious Bodies, 1916. Part I. Summary and General Tables. II. Separate Denominations, History, Description, and Statistics. 2 vols. Washington, 1919. (*Id.*)

Special Tables of Mortality from Influenza and Pneumonia, in Indiana, Kansas, and Philadelphia. September 1 to December 31, 1918. 181 pp. Washington, 1920. (*Id.*)

Transportation by Water, 1916. 230 pp. Washington, 1920. (*Id.*)

Department of Labor. Children's Bureau—

A Summary of Juvenile-Court Legislation in the United States. (By *Sophonisba P. Breckinridge* and *Helen R. Jeter.*) Publication No. 70, 110 pp. Washington, 1920. (The Bureau.)

Child-Welfare Programs, Study Outlines for the Use of Clubs and Classes. Children's Year Follow-up Series No. 7. Bureau Publication No. 73. 35 pp. Washington, 1920. (*Id.*)

The Child Welfare Special. Publication No. 69. 19 pp. Washington, 1920. (*Id.*)

Children's Year. A Brief Summary of Work done and Suggestions for Follow-up Work. Publication No. 67. 20 pp. Washington, 1920. (*Id.*)

Courts in the United States hearing Children's Cases. (By *Evelina Belden.*) Publication No. 65. 111 pp. Washington, 1920. (*Id.*)

Illegitimacy as a Child-Welfare Problem. Part I. (By *Emma O. Lundberg* and *Katharine F. Lenroot.*) Publication No. 66. 105 pp. Washington, 1920. (*Id.*)

Illegitimacy Laws of the United States and certain foreign countries. (By *Ernst Freund.*) Publication No. 42. 260 pp. Washington, 1919. (*Id.*)

Industrial Instability of Child Workers. A Study of Employment-Certificate Records in Connecticut. (By *Robert Morse Woodbury*, Ph.D.) Bureau Publication No. 74. 86 pp. Washington, 1920. (*Id.*)

Laws relating to "Mother's Pensions," in the United States, Canada, Denmark, and New Zealand. (By *Laura A. Thompson.*) Publication No. 63. 316 pp. Washington, 1919. (*Id.*)

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(c) **Foreign Countries**—*Contd.*

United States—*Contd.*

Bulletin of the U.S. Bureau of Labor Statistics, No. 256. Accidents and Accident Prevention in Machine Building. (By *Lucian W. Chaney.*) 123 pp. Washington, 1920. (The Department.)

—— No. 258. Decisions of Courts and Opinions affecting Labor, 1918. (By *Lindley D. Clark* and *Martin C. Frincke, Jr.*) 239 pp. Washington, 1920. (*Id.*)

Minnesota—

Department of Labor and Industries. Bureau of Women and Children. Women in Industry in Minnesota in 1918. Field Investigation carried on by Women in Industry Committee Council of National Defence and Bureau of Women and Children. (Written by *Carol Aronovici*, Ph.D.) 35 pp. St. Paul, 1920. (The Bureau.)

New York State—

State Industrial Commission—

Labor Law, with amendments, additions and annotations to August 1, 1920. (Prepared by the Bureau of Statistics and Information.) 191 pp. Albany, 1920. (The Commission.)

Miscellaneous Labor Laws, with amendments, additions and annotations to August 1, 1920. 151 pp. Albany, 1920. (*Id.*)

Workmen's Compensation Law, with amendments, additions and annotations to August 1, 1920. 114 pp. Albany, 1920. (*Id.*)

Special Bulletin No. 100, July, 1920. The Telephone Industry. (Prepared by the Bureau of Women in Industry.) 95 pp. Albany, 1920. (*Id.*)

—— No. 99. June, 1920. New York Labor Laws enacted in 1920. 93 pp. Albany, 1920. (*Id.*)

—— No. 98. July, 1920. Court Decisions on Workmen's Compensation Law, July, 1919–June, 1920. 113 pp. Albany, 1920. (*Id.*)

(d) **International.**

Bulletin International des Douanes. Current Numbers. September 10, 1920, October 12 and 27, December 8. January 19, 1921. (Board of Trade.)

International Labour Office. Labour Conditions in Soviet Russia. Systematic Questionnaire and Bibliography. Prepared for the Mission of Enquiry in Russia. 294 + cxliv pp. London: Harrison and Sons, Ltd. (The Publishers.)

International Financial Conference. Report of the Conference. 36 pp. Brussels, 1920. (League of Nations.)

—— Report of the Advisory Committee. Draft Rules of Procedure of the International Financial Conference. Paper No. I. Memorial on International Finance and Currency with Relative Documents. II. Economic Declaration of the Supreme Council approved on March 8, 1920. III. Currency Statistics. IV. Public Finance. Appendix I to Paper No. IV. Public Finance—Analysis of Expenditure and Revenue. Paper No. V. International Trade. VII. Official Statistics of Retail Prices in Foreign Countries. Memorandum by Professor A. L. Bowley. VIII. Coal Statistics. IX. The European Transport Situation. X. Relief Credits and the Promotion of Export. XII. Solutions Proposed: A Summary of Schemes for Remedying Present Financial Difficulties. XIII. Monetary Problems. (1) Introduction and Joint Statement of Economic Exports. (2) Memorandum Prepared for the International Financial Conference at Brussels. By *Dr. G. W. J. Bruins.* (3) Memorandum on the World's Monetary Problems. By *Gustav Cassel.* (4) Memorandum on Credit, Currency and Exchange Fluctuations. By *A. C. Pigou.* (5) Notes on the Financial and Monetary Situation. By *Charles Gide.* (6) Memorandum Prepared for the International Financial Conference at Brussels. By *M. Pantaleoni.* XIV. Price of Silver. By *G. Findlay Shirras.* XI. Exchange Control. (In French and English.)

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II. AUTHORS AND MISCELLANEOUS.

Ashby (*A. W.*). The Training of the Clergy in Social Leadership. (Appendices II and III from the Report of the Archbishop's Committee on *The Church and Rural Life.*) 15 pp. London, 1920. (The Author.)

Ashley (*Percy*). Modern Tariff History—Germany—United States—France. Third edition. x + 365 pp. London: John Murray, 1920. (The Publishers.)

Bankers Trust Company. English Public Finance, from the Revolution of 1688. With chapters on the Bank of England. By *Harvey E. Fisk.* 241 pp. New York: Bankers Trust Company, 1920. (Sir J. C. Stamp.)

Barriol (*A.*) and *Brochu* (*I.*)—

Emprunt Français en Rentes Amortissables 5, p. 100 (1920). Extrait *Journal des Economistes.* 15 février 1920. 5 pp. (Journal des Economistes.)

Note Complémentaire sur l'Emprunt Français en Rentes Amortissables 5, p. 100 (1920). Extrait *Journal des Economistes* du 15 octobre 1920. 2 pp. (*Id.*)

L'Emprunt Français 6. p. 100 (1920). Extrait *Journal des Economistes* du 15 octobre 1920. 5 pp. (*Id.*)

Blanqui (*Auguste*). Critique Sociale. (Tome premier.) x + 372 pp. Paris: Felix Alcan, 1885. (Capt. Donald.)

Boag (*Harold*). Business Capital in Excess Profits Duty Computations. An article contained in *Business Organization and Management.* Vol. 2. September and October, 1920. (The Author.)

Bonner (*H. R.*). A Graphic Method for Presenting Comparative Cost Analysis. (Reprinted from Quarterly Publications of the American Statistical Association, September, 1920.) 277–288 pp. (The Author.)

Bowley (*A. L.*)—

An Elementary Manual of Statistics. Third edition. 224 pp. London: Macdonald and Evans, 1920. (The Publishers.)

Elements of Statistics. Fourth edition. x + 454 pp. London: P. S. King and Son, Ltd., 1920. (The Publishers.)

Bowley (*A. L.*) and *Burnett-Hurst* (*A. R.*). Economic Conditions of Working-Class Households in Bolton, 1914. A supplementary chapter to "Livelihood and Poverty." 225–244 pp. London: G. Bell and Sons, 1920. (The Author.)

Carnegie Endowment for International Peace—

A Manual of the Public Benefactions of Andrew Carnegie. 321 pp. Washington, 1919. (The Endowment.)

A Monograph of Plebiscites. With a Collection of Official Documents. By *Sarah Wambaugh.* xxxv + 1088 pp. New York: Oxford University Press, 1920. (*Id.*)

The Debates in the Federal Convention of 1787 which framed the Constitution of the United States of America. Reported by James Madison. International Edition. xcvii + 731 pp. New York: Oxford University Press, 1920. (*Id.*)

Treaties for the Advancement of Peace between the United States and other Powers, negotiated by the Hon. W. J. Bryan, Secretary of State of the United States. With an introduction by James Brown Scott. lxviii + 152 pp. New York: Oxford University Press, 1920. (*Id.*)

The United States of America: A Study in International Organization. By *James Brown Scott.* xix + 605 pp. New York: Oxford University Press, 1920. (The Publishers.)

The Declaration of London, February 26, 1909. A collection of official papers and documents relating to the International Naval Conference held in London, December, 1908–February, 1909. Introduction by Elihu Root. Edited by James Brown Scott. 268 pp. New York: Oxford University Press, 1919. (The Endowment.)

Preliminary Economic Studies of the War, No. 17. Early Effects of the War upon the Finance, Commerce and Industry of Peru. By *L. S. Rowe,* Ph.D. 60 pp. New York: Oxford University Press, 1920. (*Id.*)

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II. Authors and Miscellaneous—*Contd.*

Carnegie Endowment for International Peace—*Contd.*

Preliminary Economic Studies of the War, No. 19. Prices and Price Control in Great Britain and the United States during the World War. By *Simon Litman*. 331 pp. New York: Oxford University Press, 1920. (The Endowment.)

American Foreign Policy. (With an introduction by Nicholas Murray Butler.) vii + 128 pp. Washington, 1920. (*Id.*)

The Project of a Permanent Court of International Justice and Resolutions of the Advisory Committee of Jurists. Report and Commentary by James Brown Scott. 235 pp. Washington, 1920. (*Id.*)

The Declaration of Independence—The Articles of Confederation—The Constitution of the United States. Edited with an introductory note by James Brown Scott. xix + 94 pp. New York: Oxford University Press, 1917. (*Id.*)

The Recommendations of Habana concerning International Organization adopted by the American Institute of International Law at Habana, Jan. 23, 1917. Address and Commentary by James Brown Scott. 100 pp. New York: Oxford University Press, 1917. (*Id.*)

The Proceedings of the Hague Peace Conference. Translation of the Official Texts. The Conference of 1899. xxii + 883 pp. New York: Oxford University Press, 1920. (*Id.*)

Carnegie Institute of Washington. Heredity of Constitutional Mental Disorders. By *Charles B. Davenport*. Eugenics Record Office, Bulletin No. 20, pp. 300–310. New York, 1920. (The Eugenics Record Office.)

Charlier (*C. V. L.*). On the Method of Laplace for the Asymptotic Computation of Functions. (Arkiv. för Matematik, Astronomi och Fysik, Band 15, No. 4.) 14 pp. Stockholm, 1920. (Lunds Astronomiska Observatorium.)

Charlier (*C. V.*). Vorlesungen über die Grundzüge der Mathematischen Statistik. 125 pp. Lund. (The Author.)

Chart (*D. A.*). An Economic History of Ireland. 210 pp. Dublin: Talbot Press, Ltd., 1920. (The Publishers.)

Conjoint Board of Scientific Societies. Report on Compulsory Adoption of the Metric System in the United Kingdom submitted by the Metric Committee appointed by the Conjoint Board and published on the authority of the Committee. 70 pp. (The Conjoint Board.)

Curtler (*W. H. R.*). The Enclosure and Redistribution of our Land. viii + 234 pp. London: Oxford University Press, 1920. (The Publishers.)

Dalton (*Hugh*). Some aspects of the Inequality of Incomes in Modern Communities. ix + 360 pp., 8vo. London: Messrs. Routledge, 1920. (The Publishers.)

Daniels (*George W.*). The Early English Cotton Industry, with some unpublished letters of Samuel Crompton. (Introductory Chapter by George Unwin.) xxxi + 214 pp. Manchester: University Press, 1920. (The Publishers.)

Douglas (*C. H.*) and *Orage* (*A. R.*). Credit-Power and Democracy. With a Draft Scheme for the Mining Industry. xi + 212 pp. London: Cecil Palmer, 1920. (The Publishers.)

Dreyer (*Georges*) in collaboration with *Hanson* (*George Fulford*). The Assessment of Physical Fitness, with Tables. xi + 115 pp. London: Cassell and Co., Ltd., 1920. (The Publishers.)

Dunraven (*The Earl of*). The Crisis in Ireland. Federal Union, through Devolution. 39 pp., 8vo. London: Hodder and Stoughton, Ltd., 1920. (The Author.)

Edgeworth (*F. Y.*). On the Application of Probabilities to the Movement of Gas-Molecules. (Reprinted from the *Philosophical Magazine*, September, 1920.) pp. 249–272. (The Author.)

Elbourne (*Edward T.*). Factory Administration and Cost Accounts. xx + 810 pp. London: Longmans, Green and Co., 1921. (The Publishers.)

Esscher (*Fredrik*). Über die Sterblichkeit in Schweden, 1886–1914. (Meddelanden från Lunds Astronomiska Observatorium.) (Lunds Astronomiska Observatorium.)

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Digitized by Arya Samaj Foundation Chennai and eGangotri

II. Authors and Miscellaneous—*Contd.*

Fayle (*G. Ernest*). History of the Great War. Based on Official Documents. Seaborne Trade, Vol. 1. The Cruiser Period, with maps. xvi + 442 pp. London: John Murray, 1920. (The Publishers.)

Fisher (*Edmund I.*). A Study of Prices. Address delivered at the Fifth Annual Michigan State Conference of Credit Men, Nov. 23, 1920. (Bank of Detroit.) 16 pp. (The Author.)

Frank (*Tenney*). The Economic History of Rome. 310 pp. Baltimore: The Johns Hopkins Press, 1920. (The Author.)

Gibson (*A. H.*). Credit, Inflation and Prices. (An address to the Economic Science and Statistics Section of the British Association for the Advancement of Science, Cardiff, August 26.) 14 pp. (The Author.)

Goodenough (*Frederick C.*). An Address delivered to the Liverpool and District Bankers' Institute on Dec. 6, 1920. 16 pp. London: Blades, East and Blades. (The Author.)

Guaranty Trust Company of New York. Financial and Business Conditions in the United States. 4 pp. (The Company.)

Hersch (*L.*). L'Inégalité devant la mort d'après les statistiques de la ville de Paris. Effets de la Situation Sociale sur la Mortalité, avec 7 diagrammes. (Extrait de la Revue d'Economie Politique, Nos. 3–4, 1920.) 54 pp. Paris: Librairie de la Société du Recueil Sirey, 1920. (The Publishers.)

Hills (*G. F. S.*). A Multiple Integral of Importance in the Theory of Statistics. (Extracted from the Proceedings of the London Mathematical Society, Ser. 2, Vol. 19, Part 4.) 281–292 pp. London: Hodgson and Son. (The Author.)

Hoffman (*Frederick L.*)—

Is Leprosy Increasing? An address delivered at a Meeting of the American Medical Association, New Orleans, April 26, 1920. 53 pp. Newark, N.J.: Prudential Press, 1920. (The Author.)

National Health Insurance and the Medical Profession. A consolidation of papers. xxii + 122 pp. Newark, N.J.: Prudential Press, 1920. (*Id.*)

Insolera (*Filadelfo*). Lezioni di Statistica Metodologica. 191 pp. Torino: Libreria Fratelli Treves, 1921. (The Publishers.)

Iron and Steel Institute. Carnegie Scholarship Memoirs. Vol. X, 1920. v + 150 pp. London, 1920. (The Institute.)

Janicki (*Dr. S.*). Industrial Reconstruction in Poland. 32 pp. London: Polish Press Bureau, 1920. (The Publishers.)

Janicki (*S.*) and *Doerman* (*A.*). The Economic Aspect of the Upper Silesian Question. 36 pp. Polish Press Bureau, 1920. (The Polish Press Bureau.)

Johns Hopkins University Studies in Political Science. Series XXXVII—

No. 4. The Obligation of Contracts Clause of the United States Constitution. By *Warren B. Hunting*, Ph.D. xii + 122 pp. Baltimore, 1919. (The University.)

No. 2. The Labor Law of Maryland. By *Malcolm H. Lauchheimer*, Ph.D. xii + 166 pp. Baltimore, 1919. (*Id.*)

No. 3. The American Colonization Society, 1817–40. xii + 231 pp. Baltimore, 1919. (*Id.*)

Kemmerer (*Edwin Walter*). High Prices and Deflation. xii + 86 pp. Princeton University Press, N.J. (Humpfrey Milford). (The Publishers.)

Law (*John*). Money and Trade consider'd; with a Proposal for Supplying the Nation with Money. 106 pp. London, 1720. (Capt. Donald.)

Lawson (*F. M.*). Industrial Control. The Application to Industry of Direction, Control and Light. xiv + 130 pp. London: Sir Isaac Pitman and Sons, 1920. (The Publishers.)

Layton (*Walter T.*). An Introduction to the Study of Prices, with Special Reference to the History of the Nineteenth Century. xiii + 194 pp. London: Macmillans and Co., Ltd. (The Publishers.)

Lyons (*Vyvyan Ashleigh*). Wages and Empire. 96 pp. London: Longmans, Green and Co., 1920. (The Publishers.)

McCall (*J. H.*). The Money Market. Some Present-Day Influences. 16 pp. London: Gee and Co., Ltd., 1920. (The Publishers.)

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Digitized by Arya Samaj Foundation Chennai and eGangotri

II. Authors and Miscellaneous—*Contd.*

McKnight (*W. A.*). Ireland and the Ulster Legend or the Truth about Ulster. Foreword by Sophie Bryant, D.Sc. 96 pp. London: P. S. King and Son, Ltd. (The Author.)

Madsen (*A. W.*). Land Value Ratings and the Abolition of Rates on Buildings and Improvements. 32 pp., 4to. Published by the United Committee for the Taxation of Land Values. London, 1920. (The Author.)

Malmquist (*K. G.*). Die Berechnung von Schiefheit und Exzess in der Verteilung der Scheinbaren Magnitude. (Arkiv. för Matematik, Astronomi och Fysik, Band 15, No. 9.) 18 pp. Stockholm, 1920. (Lunds Astronomiska Observatorium.)

Mathieson (*William Law*). England in Transition, 1789–1832. A Study of Movements. xiv + 285 pp. London: Longmans, Green and Co., 1920. (The Publishers.)

Mathieson (*Messrs. E. C.*) *and Sons.* £1 Decimal Stock Equivalents from 40 to 100 per cent. 22 pp. London: Mathieson and Sons, 1920. (The Publishers.)

Mayr (*Dr. Georg von*). Soziologie und Statistik. Extract from Allgemeines Statistisches Archiv. Bd. 12, 1920. 31 pp. 1920. (The Author.)

Messina (*Ignazio*). Su di un nuovo teorema di calcolo delle probabilita sul teorema del Bernoulli e sui postulati empirici per la loro applicazione. (Estratto dal *Bolletino del Lavoro e della Previdenza*, Giugno, 1920.) 11 pp. Roma, 1920. (The Author.)

Milner (*Dennis*). Higher Production. By a Bonus on National Output. 127 pp. London: George Allen and Unwin, Ltd., 1920. (The Author.)

Money (*Sir Leo Chiozza*). The Triumph of Nationalisation. xiv + 276 pp. London: Messrs. Cassell and Co., Ltd. (The Publishers.)

Pagar (*Shankar Madhav*). The Indian Income Tax. Its History, Theory and Practice. 219 pp. Baroda, 1920. (The Author.)

Pigou (*A. C.*)—

A Capital Levy and a Levy on War Wealth. (The World of To-day.) 62 pp. London: Humphrey Milford, Oxford University Press, 1920. (The Publishers.)

The Economics of Welfare. xxxvi + 976 pp. London: Macmillan and Co., Ltd., 1920. (*Id.*)

Plehn (*Carl C.*). Introduction to Public Finance. Fourth edition. xix + 446 pp. London: Macmillan and Co., Ltd., 1920. (The Publishers.)

Prato (*Giuseppe*)—

Le Fonti Storiche della Legislazione Economica di Guerra. Il controllo statale dei cambi in Piemonte nel 1798. Note I–II. (Reprint.) 39 pp. Torino, 1918. (Cobden Club.)

Un tentativo di banco pubblico a Mantova nel 1626. (Reprint.) 426–435 pp. (*Id.*)

Il problema dell'assistenza legale in Francia e in Piemonte prima della Rivoluzione. (Reprint.) Milano, 1909. (*Id.*)

La battaglia per le case e il Decreto del domicilio coatto. (Reprint.) 7 pp. Milano, 1919. (*Id.*)

Speculazione e Prezzi sul Mercato del Cotone Americano. (Reprint.) 29 pp. Torino, 1911. (*Id.*)

Variazioni sul Tema Dell'Unita Sindacale. (Reprint.) 14 pp. Torino. (*Id.*)

Due Secoli di Vita Agricola in una Provinca Piemontese. (Reprint.) 31 pp. Torino, 1909. (*Id.*)

Gli Insegnamenti d'una Regolamentazione Arbitraria di Prezzi nelle Borse del Cotone Americane. (Reprint.) 30 pp. Torino, 1910. (*Id.*)

Censimenti e Popolazione in Piemonte nei secoli XVI, XVII e XVIII. (Reprint.) 117 pp. Roma, 1906. (*Id.*)

Le Dogane Interne nel Secolo XX. 'Il Mercantilismo municipale. 58 pp. Torino, 1911. (*Id.*)

Problemi Monetari e Bancari nei secoli XVII e XVIII. Documenti Finanziari degli stati della Monarchia Piemontese, Serie I, Volume III. xiii + 315 pp. Torino, 1910. (*Id.*)

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II. Authors and Miscellaneous—*Contd.*

Prato (*Giuseppe*)—*Contd.*
Il Costo della Guerra di Successione Spagnuola e la Spese Pubbliche in Piemonte dal 1700 al 1713. xii + 410 pp. Torino, 1917. (Cobden Club.)
La terra ai contadini o la terra agli impiegati ? (Biblioteca di Science Economiche, No. 2.) viii + 152 pp. Milano, 1919. (*Id.*)
Problemi del Lavoro nell'ora Presente. Riassunti di lezioni tenute all'Universita Commerciale Luigi Bocconi dal 4 al 10 maggio 1919. (Biblioteca di Scienze Economiche, No. 3.) 148 pp. Milano, 1920. (*Id.*)
Il Problema del Combustibile nel Periodi Pre-Rivoluzionario come Fattore della Distribuzione Topografica della Industrie. (Reale Accademia Delle Scienze di Torino, Anno 1911–1912.) 113 pp., fol. Torino, 1912. (*Id.*)
L'Evoluzione Agricola nel Secolo XVIII e la Cause Economiche dei Moti del 1792–98 in Piemonte. (Reale Accademia Delle Scienze di Torino, Anno 1908–09.) pp. 34–106, fol. Torino, 1909. (*Id.*)

Raine (*C. E.*) and *Luboff* (*E.*). Bolshevik Russia. 192 pp. London : Nisbet and Co., 1920. (The Publishers.)

Ramanathan (*A. V.*). The Coming Census and Municipalities. (Reprinted from the Local Self-Government Gazette.) 10 pp. Bangalore : Higginbothams, Ltd. (The Author.)

Rosenfeld (*Dr. Siegfried*). Die Änderungen der Tuberkulosehäufigkeit Österreichs durch den krieg. (Veröffentlichen des Volksgesundheitsamtes im Staatsamte für Soziale Verwaltung.) 110 pp. and tables. Wien, 1920. (The Author.)

Schonland (*S.*). Phanerogamic Flora of the Divisions of Uitenhage and Port Elizabeth. (Botanical Survey of South Africa, Memoir No. 1.) 118 pp. Pretoria, 1919. (Department of Agriculture.)

Seoul Press. Korea and Shantung versus the White Peril. (*Charles H. Sherrill*) and The Anti-Japanese Agitation in California (*Colonel John P. Irish*). 1 pamphlet, 36 pp. Seoul Press, Chosen, 1920. (Publishers.)

Sheppard (*W. E.*). Reduction of Error by Linear Compounding. (Philosophical Transactions of the Royal Society of London, Series A, Vol. 221, 199–237 pp.) A. 588. 1920. (The Author.)

Smithsonian Institution. Smithsonian Physical Tables. Seventh Revised edition. Prepared by Frederick E. Fowle. Smithsonian Miscellaneous Collection, Volume 71, No. 1. Publication 2539. xlvi + 450 pp. Washington, 1920. (The Institution.)

Snowden (*Philip*). Labour and National Finance. 169 + 16 pp. London : Leonard Parsons, 1920. (The Publishers.)

Stiles (*C. R.*). Investment terms simplified. 39 pp. London : Financial Review of Reviews. (The Author.)

Subercaseaux (*G.*). Le Papier-Monnaie. 446 pp. Paris : M. Giard et E. Briere, 1920. (The Publishers.)

Torres (*Dr. Theophilo*). La Campagne Sanitaure au Brésil. (Direction Générale de la Santé Publique.) xii + 122 pp. Paris : Société Générale d'Impression, 1913. (General Register Office, Somerset House.)

Towler (*W. G.*) and *Ray* (*W.*). Socialism : Its Promise and Failure. x + 319 pp. London : P. S. King and Son, 1920. (Department of Social Economics.)

Turin (*S. P.*). Problems of Labour in Great Britain. (In Russian.) Labour and the New Social Order—Statistics—Bibliography. (In English.) xi + 68 pp. London : "Renaissance Publishers," 1920. (The Author.)

University of California. Publications in Economics—
Collective Bargaining and Trade Agreements in the Brewery, Metal, Teaming and Building Trades of San Francisco. By *Ira B. Cross*, Ph.D. Vol. 4, No. 4. University of California Press, Berkeley, 233–364 pp., 1918. (The University.)
The Conflict of Tax Laws. By *Rowland Estcourt*, Ph.D. Vol. 4, No. 3, pp. 115–231, 1918. University of California Press. (*Id.*)

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II. Authors and Miscellaneous—*Contd.*

University of Illinois. Studies in the Social Sciences—
Vol. VI, No. 4. The Household of a Tudor Nobleman. By *Paul Van Brunt Jones.* 277 pp. Urbana, 1917. (The University of Illinois.)
Vol. VII. December, 1918, No. 4. The Journeymen Tailors' Union of America. A Study in Trade Union Policy. By *Charles Jacob Stowell,* Ph.D. 143 pp. Illinois, 1917. (The University.)

Vlakhoff (*Dimitre*). La Situation Economique et Financière de la Bulgarie exposé fait dans la XXVe session ordinaire de la Chambre de Commerce et d'Industrie de Varna. 83 pp. Sofia, 1920. (The Author.)

Webb (*Montague de P.*). Britain Victorious: A Plea for Sacrifice. (Second edition.) 157 pp. London: P. S. King and Son, 1920. (The Author.)

Webb (*Sidney*). Grants in Aid: A Criticism and a Proposal. New edition, revised and enlarged. (Studies in Economics and Political Science. No. 24 in the Series of Monographs by Writers connected with the London School of Economics and Political Science.) 145 + 8 pp. London: Longmans, Green and Co., 1920. (The Publishers.)

Webb (*Sidney* and *Beatrice*). Industrial Democracy. Edition of 1920 with new introduction. xxxix + 899 pp. London: Longmans, Green and Co., 1920. (The Publishers.)

Wicksell (*S. D.*)—
Elementen av Statistikens Teori med Särskild Hänsyn til Befolknings-statistiken. Svenska Forsäkringsföreningens Publikationsserie No. 2. viii + 176 pp. Stockholm, 1920.
Beiträge zum Studium der Bravais'schen Funktion. Arkiv für Matematik, Astronomi och Fysik, Band 15, No. 7. (Meddelanden från Lunds Astronomiska Observatorium.) 12 pp. Stockholm, 1920. (The Author.)

Wilcox (*Delos F.*). Working Capital in Street Railway Valuation. Supplement to the Annals of the American Academy of Political and Social Science, November, 1920. 24 pp. Philadelphia, 1920. (The Academy.)

Yule (*G. Udny*). The Fall of the Birth-Rate. (A Paper read before the Cambridge University Eugenics Society, May 20, 1920.) 43 pp. Cambridge University Press, 1920. (The Publishers.)

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REVENUE OF THE UNITED KINGDOM.

Net Produce in Quarters of **1920**, *and in Financial Years ended* **March 31, 1919-20, 1918-19, 1917-18, 1916-17.**

(000 omitted.)

QUARTERS, ended	March 31, 1920.	June 30, 1920.	Sept. 30, 1920.	Dec. 31, 1920.	Total for calendar year, 1920.
	£	£	£	£	£
Customs	37,883,	33,301,	34,533,	33,499,	139,216,
Excise	39,007,	38,107,	50,739,	60,644,	188,497,
Stamps and Estate Duties ..	21,921,	15,836,	21,127,	18,512,	77,396,
Land Tax and House Duty ..	2,170,	370,	20,	60,	2,620,
Postal Service	10,300,	7,150,	8,950,	8,800,	35,200,
Telegraph Service	1,300,	1,200,	1,500,	1,350,	5,350,
Telephone Service	2,850,	1,900,	2,300,	2,600,	9,650,
	115,431,	97,864,	119,169,	125,465,	457,929,
Property and Income Tax, including Super-tax	221,955,	53,718,	72,617,	30,487,	378,777,
	337,386,	151,582,	191,786,	155,952,	836,706,
Excess Profits Duty	87,219,	56,368,	53,032,	46,954,	243,573,
Land Value Duties	311,	20,	—	—	331,
Crown Lands	160,	110,	170,	230,	670,
Receipts from Sundry Loans—					
Ordinary receipts* ..	337,	50,	526,	61,	974,
Special receipts†	6,682,	3,775,	1,749,	8,749,	20,955,
Miscellaneous—					
Ordinary receipts‡ ..	5,624,	4,734,	6,464,	6,583,	23,405,
Special receipts§	205,600,	98,347,	50,586,	50,975,	405,508,
Totals	643,319,	314,986,	304,313,	269,504,	1,532,122,

YEARS, ended March 31,	1919-20.	1918-19.	1919-20.		Corresponding years.	
			Increase.	Decrease.	1917-18.	1916-17.
	£	£	£	£	£	£
Customs	149,630,	102,780,	46,580,	—	71,261,	70,561,
Excise	133,663,	59,440,	74,223,	—	38,772,	56,380,
Stamps and Estate Duties ..	63,490,	42,700,	20,790,	—	39,974,	39,110,
Land Tax and House Duty ..	2,640,	2,480,	160,	—	2,625,	2,580,
Postal Service	31,000,	29,400,	1,600,	—	25,200,	24,350,
Telegraph Service	4,850,	3,800,	1,050,	—	3,500,	3,350,
Telephone Service	8,300,	6,800,	1,500,	—	6,600,	6,400,
	393,303,	247,400,	145,903,	—	187,932,	202,731,
Property and Income Tax, including Super-tax ..	359,099,	291,186,	67,913,	—	239,509,	205,033,
	752,402,	538,586,	213,816,	—	427,441,	407,764,
Excess Profits Duty	290,045,	285,028,	5,017,	—	220,214,	139,120,
Land Value Duties	663,	664,	—	1,	685,	521,
Crown Lands	680,	760,	—	80,	690,	650,
Receipts from Sundry Loans—						
Ordinary receipts	1,004,	11,679,	3,273,	—	6,056,	8,056,
Special receipts	13,948,					
Miscellaneous—						
Ordinary receipts‡	16,050,	52,303,	288,526,	—	52,148,	16,517.
Special receipts§	264,779,					
Totals	1,339,571,	889,020,	450,632,	81,	707,234,	573,428,
			NET INC. £450,551,			

* From Suez Canal shares and other investments.
† Interest and repayments of War Loans to Dominions, Allies, etc.
‡ Mint receipts, Fee and Patent stamps, etc., and Currency Notes account excess interest.
§ War contributions and receipts from sale of war property and from trading undertakings.

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Values (c.i.f.) of Imports* *into the United Kingdom for the years* 1913-19-20.

[From the Monthly Trade Returns, December, 1920.]

	Year ended December 31,			Increase (+) or Decrease (−) in 1920 as compared with 1919.	Increase (+) or Decrease (−) in 1920 as compared with 1913.
	1913.	1919.	1920.		
	£	£	£	£	£
I. Food, Drink and Tobacco—					
A. Grain and flour	84,403,247	151,676,095	231,712,529	+ 80,036,434	+147,309,282
B. Feeding-stuffs for animals	4,869,758	11,811,258	8,899,297	− 2,911,961	+ 4,029,539
C. Meat	56,421,348	175,415,708	141,557,025	− 33,858,683	+ 85,135,677
D. Animals, living, for food	305,063	—	—	—	− 305,063
E. Other food and drink, non-dutiable	82,434,285	162,613,494	174,759,050	+ 12,145,556	+ 92,324,765
F. Other food and drink, dutiable	58,683,367	175,948,249	174,768,302	− 1,179,947	+116,084,935
G. Tobacco	8,032,562	41,653,708	35,676,570	− 5,977,138	+ 27,644,008
Total, Class I	295,149,630	719,118,512	767,372,773	+ 48,254,261	+472,223,143
II. Raw Materials and Articles Mainly Unmanufactured—					
A. Coal	5,960	1,450	26,633	+ 25,183	+ 20,673
B. Other non-metallic mining and quarry products and the like	3,114,389	5,124,977	9,694,119	+ 4,569,142	+ 6,579,730
C. Iron ore and scrap	7,454,253	11,985,135	20,799,861	+ 8,814,726	+ 13,345,608
D. Non-ferrous metalliferous ores and scrap	12,573,118	13,942,195	17,711,627	+ 3,769,432	+ 5,138,509
E. Wood and timber	33,788,884	72,306,469	82,164,620	+ 9,858,151	+ 48,375,736
F. Raw cotton and cotton waste	70,570,547	190,771,416	256,765,237	+ 65,993,821	+186,194,690
G. Wool, raw, and waste, and woollen rags	37,736,434	104,753,205	93,957,397	− 10,795,808	+ 56,220,963
H. Silk, raw, knubs and noils	1,295,738	3,164,316	4,071,152	+ 906,836	+ 2,775,414
I. Other textile materials	18,455,397	25,653,870	32,727,174	+ 7,073,304	+ 14,271,777
J. Oil seeds, nuts, oils, fats, resins and gums	29,418,299	91,569,837	82,224,592	− 9,345,245	+ 52,806,293
K. Hides and skins undressed	15,067,176	29,508,074	31,976,823	+ 2,468,749	+ 16,909,647
L. Paper-making materials	5,815,803	16,549,424	33,278,000	+ 16,728,576	+ 27,462,197
M. Rubber	21,894,677	26,489,901	26,768,813	+ 278,912	+ 4,874,136
N. Miscellaneous, raw materials and articles mainly unmanufactured	12,749,045	14,963,271	19,334,570	+ 4,371,299	+ 6,585,525
Total, Class II.	269,939,720	606,783,540	711,500,618	+104,717,078	+441,560,898
III. Articles Wholly or Mainly Manufactured—					
A. Coke and manufactured fuel	30,740	4,172	10,831	+ 6,659	− 19,909
B. Earthenware, glass, abrasives, &c.	5,408,376	3,862,339	11,112,872	+ 7,250,533	+ 5,704,496
C. Iron and steel and manufactures thereof	15,889,963	11,613,292	29,005,826	+ 17,392,534	+ 13,115,863
D. Non-ferrous metals and manufactures thereof	29,600,862	33,577,890	39,221,892	+ 5,644,002	+ 9,621,030
E. Cutlery, hardware, implements, and instruments	6,698,996	9,051,055	10,605,991	+ 1,554,936	+ 3,906,995
F. Electrical goods and apparatus	1,587,294	1,204,511	1,826,250	+ 621,739	+ 238,956
G. Machinery	7,266,649	15,020,032	19,961,401	+ 4,941,369	+ 12,694,752
H. Manufactures of wood and timber	3,583,187	4,309,807	8,630,977	+ 4,321,170	+ 5,047,790
I. Cotton yarns and manufactures	9,207,663	5,366,856	9,825,710	+ 4,458,854	+ 618,047
J. Woollen and worsted yarns and manufactures	10,019,579	3,171,031	17,702,023	+ 14,530,992	+ 7,682,444
K. Silk and silk manufactures	15,115,381	22,945,305	36,915,912	+ 13,970,607	+ 21,800,531
L. Manufactures of other textile materials	9,812,987	11,710,729	23,118,422	+ 11,407,693	+ 13,305,435
M. Apparel	11,173,143	7,446,059	15,033,291	+ 7,587,232	+ 3,860,148
N. Chemicals, drugs, dyes and colours	13,335,795	21,041,551	35,315,326	+ 14,273,775	+ 21,979,531
O. Oils, fats, and resins, manufactured	13,797,671	43,587,131	77,000,749	+ 33,413,618	+ 63,203,078

* The values of the Imports represent the cost, insurance, and freight; or, when goods are consigned for sale, the latest sale value of such goods.

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Values (c.i.f.) of **Imports** *for the years* **1913-19-20**—*Contd.*

[From the Monthly Trade Returns, December, 1920.]

	Year ended December 31,			Increase (+) or Decrease (−) in 1920 as compared with 1919.	Increase (+) or Decrease (−) in 1920 as compared with 1913.
	1913.	1919.	1920.		
III. Articles Wholly or Mainly Manufactured—*Contd.*	£	£	£	£	£
P. Leather and manufactures thereof	11,630,421	38,006,137	20,514,814	− 17,491,323	+ 8,884,393
Q. Paper and cardboard	7,691,540	13,021,023	30,252,181	+ 17,231,158	+ 22,560,641
R. Vehicles (including locomotives, ships and aircraft)	5,628,961	9,816,138	27,233,252	+ 17,417,114	+ 21,604,291
S. Rubber manufactures	3,616,348	3,000,967	7,102,510	+ 4,101,543	+ 3,486,162
T. Miscellaneous articles mainly or wholly manufactured	19,943,316	38,198,728	34,432,968	− 3,765,760	+ 14,489,652
Total, Class III	201,038,872	295,954,753	454,823,198	+158,868,445	+ 253,784,326
IV. Animals, Not for Food	488,411	404,942	401,739	− 3,203	− 86,672
V. Parcel Post, non-dutiable Articles	2,118,106	4,299,407	3,045,531	− 1,250,673	+ 525,686
Total	768,734,739	1,626,156,212	1,936,742,120	+310,585,908	+1,168,007,381

Values (f.o.b.) of **Exports*** *of Produce and Manufactures of the United Kingdom for the years* **1913-19-20.**

[From the Monthly Trade Returns, December, 1920.]

	Year ended December 31,			Increase (+) or Decrease (−) in 1920 as compared with 1919.	Increase (+) or Decrease (−) in 1920 as compared with 1913.
	1913.	1919.	1920.		
I. Food, Drink, and Tobacco—	£	£	£	£	£
A. Grain and flour	2,305,372	3,381,282	2,779,046	− 602,236	+ 473,674
B. Feeding-stuffs for animals	2,169,500	304,841	1,017,104	+ 712,263	− 1,152,396
C. Meat	1,196,209	628,850	860,978	+ 232,128	− 335,231
D. Animals, living, for food	42,698	188	13,889	+ 13,701	− 28,809
E. and F. Other food and drink	24,785,594	24,288,550	37,092,037	+12,803,487	+ 12,306,443
G. Tobacco	3,376,472	5,166,962	9,130,105	+ 3,963,143	+ 5,753,633
Total, Class I	33,875,845	33,770,679	50,893,159	+17,122,486	+ 17,017,314
II. Raw Materials and Articles Mainly Unmanufactured—					
A. Coal	50,727,252	83,213,714	99,627,146	+16,413,432	+ 48,899,894
B. Other non-metallic mining and quarry products and the like	868,614	866,585	2,404,566	+ 1,537,981	+ 1,535,952
C. Iron ore and scrap	418,566	321,270	630,159	+ 308,889	+ 211,593
D. Non-ferrous metalliferous ores and scrap	167,505	72,792	2,204,072	+ 2,131,280	+ 2,036,567
E. Wood and timber	340,745	861,767	1,012,053	+ 150,286	+ 671,308
F. Raw cotton and cotton waste	—	—	3,098,523	+ 3,098,523	+ 3,098,523
G. Wool, raw and waste, and woollen rags	4,623,468	7,287,395	8,787,180	+ 1,499,785	+ 4,163,712
H. Silk, raw, knubs and noils	119,942	133,179	94,314	− 38,865	− 25,628
I. Other textile materials	314,478	519,621	634,698	+ 115,077	+ 320,220
J. Oil seeds, nuts, oils, fats, resins, and gums	2,871,888	11,847,867	13,597,502	+ 1,749,635	+ 10,725,614
K. Hides and skins, undressed	1,886,305	1,625,901	4,032,307	+ 2,406,406	+ 2,146,002
L. Paper-making materials	958,435	906,074	2,516,654	+ 1,610,580	+ 1,558,219
M. Rubber	—	240,849	521,109	+ 280,260	+ 521,109
N. Miscellaneous raw materials and articles mainly unmanufactured	2,876,121	3,393,515	6,495,108	+ 3,101,593	+ 3,618,987
Total, Class II	66,173,319	111,290,529	145,655,391	+34,364,862	+ 79,482,072

* The values of the Exports represent the cost and the charges of delivering the goods on board the ship, and are known as the "free on board" values.

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Values (f.o.b.) of **Exports** *for the years* **1913-19-20**—*Contd.*

[From the Monthly Trade Returns, December, 1920.]

	Year ended December 31,			Increase (+) or Decrease (−) in 1920 as compared with 1919.	Increase (+) or Decrease (−) in 1920 as compared with 1913.
	1913.	1919.	1920.		
	£	£	£	£	£
III. Articles Wholly or Mainly Manufactured—					
A. Coke and manufactured fuel	2,932,408	9,083,971	20,692,095	+ 11,608,124	+ 17,759,687
B. Earthenware, glass, abrasives, &c.	7,426,487	7,918,983	18,323,781	+ 10,404,798	+ 10,897,294
C. Iron and steel and manufactures thereof	55,350,747	64,423,510	128,942,618	+ 64,519,108	+ 73,591,871
D. Non-ferrous metals and manufactures thereof	12,036,103	14,370,386	25,867,965	+ 11,497,579	+ 13,831,862
E. Cutlery, hardware, implements and instruments	7,128,645	7,944,965	13,611,473	+ 5,666,508	+ 6,482,828
F. Electrical goods and apparatus	5,386,273	5,708,018	11,604,386	+ 5,896,368	+ 6,218,113
G. Machinery	33,602,474	30,741,551	63,457,987	+ 32,716,436	+ 29,855,513
H. Manufactures of wood and timber	2,041,640	1,151,800	2,835,604	+ 1,683,804	+ 793,964
I. Cotton yarns and manufactures	126,467,230	238,844,967	401,682,535	+162,837,568	+275,215,305
J. Woollen and worsted yarns and manufactures	35,709,970	95,634,442	134,969,462	+ 39,335,020	+ 99,259,492
K. Silk and silk manufactures	2,157,530	3,691,092	5,197,604	+ 1,506,512	+ 3,040,074
L. Manufactures of other textile materials	16,069,994	26,080,122	45,037,326	+ 18,357,204	+ 28,967,332
M. Apparel	20,973,390	23,829,328	48,887,862	+ 25,058,534	+ 27,914,472
N. Chemicals, drugs, dyes and colours	19,533,388	27,015,153	40,729,760	+ 13,714,607	+ 21,196,372
O. Oils, fats and resins, manufactured	4,443,896	13,226,839	13,615,796	+ 388,957	+ 9,171,900
P. Leather and manufactures thereof	5,278,640	7,146,098	11,672,599	+ 4,526,501	+ 6,393,959
Q. Paper and cardboard	3,679,195	4,230,910	12,817,859	+ 8,586,949	+ 9,138,664
R. Vehicles (including locomotives, ships and aircraft)	24,508,382	13,930,593	60,165,590	+ 46,234,997	+ 35,657,208
S. Rubber manufactures	3,088,449	7,352,118	11,549,243	+ 4,197,125	+ 8,460,794
T. Miscellaneous articles mainly or wholly manufactured	26,005,593	38,559,628	49,070,253	+ 10,510,625	+ 23,064,660
Total, Class III	413,820,434	641,484,474	1,120,731,798	+479,247,324	+706,911,364
IV. Animals, Not for Food	2,229,868	1,814,944	4,818,879	+ 3,003,935	+ 2,589,011
V. Parcel Post	9,154,129	12,092,686	18,288,679	+ 3,192,058	+ 4,315,671
Total	525,253,595	798,638,362	1,335,569,027	+536,930,665	+810,315,432

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FOREIGN EXCHANGES.—*Quotations as under,* LONDON *on Paris and Calcutta, and New York and Hong Kong on* LONDON, *for* 1920.

1	2	3	4	5	6	7	8
		Calcutta.				Price per Ounce.	
Dates. (Thursdays)	London on Paris. Cables.	London on Calcutta. Demand.	India Council Bills. Average Price per Rupee. Immediate T.T.	New York on London. Cables.	Hong Kong on London. T.T. (Fridays)	Gold Bars (Fine). (Wednesdays)	Standard Silver in Bars.
1920.	f. c.	s. d.	s. d.	$ cts.	s. d.	s. d.	s. d.
Jan. 1	—	—	2 4¼	—	4 10	109 0	6 4⅝
„ 15	42·15	2 3⅝	(Jan. 6.)	3·71	4 11	110 0	6 9½
„ 29	46·00	—		3·52¾	5 3½	117 6	7 0½
Feb. 12	48·40	2 6⅞	None offered subsequently.	3·38¼	6 1½	123 0	7 5½
„ 26	48·10	2 6⅞		3·37⅛	5 9	120 8	6 10⅜
Mar. 11	49·00	2 3⅛	—	3·75	5 3*	111 9	6 3
„ 25	53·50	2 3⅜	—	3·86¾	4 11	108 3	5 11½
Apl. 8	60·50	2 2⅞	—	3·98½	4 11	103 2	6 0⅛
„ 22	64·80	2 2⅞	—	3·88¼	4 9½	104 9	5 8⅝
May 6	63·20	2 1⅝	—	3·84⅝	4 5	107 6	5 3½
„ 20	53·50	2 0⅛	—	3·82	4 1	108 8	4 10¼
June 3	51·30	2 0⅞	—	3·92¼	4 1	104 10	4 9
„ 17	50·30	1 9⅞	—	3·98½	3 10½	104 2	3 8⅜
July 1	47·80	1 7⅝	—	3·95⅞	3 8	104 0	4 4
„ 15	46·80	1 9⅝	—	3·89¾	3 8½	105 0	4 5¾
„ 29	49·00	1 10 13/32	—	3·73¼	3 11⅞	108 9	4 8⅛
Aug. 12	50·10	1 10⅜	—	3·63¼	4 1½	113 0	4 10⅜
„ 26	50·80	1 10	—	3·58¾	4 4	116 0	5 1
Sept. 9	52·00	1 9⅜	—	3·53	4 2½	115 11	4 11
„ 23	51·20	1 9¾	—	3·50¼	4 4	117 6	5 0
Oct. 7	52·30	1 7⅝	—	3·50½	4 1½	117 1	4 8⅞
„ 21	53·05	1 6¾	—	3·43¾	3 11*	118 7	3 7
Nov. 4	54·60	1 7	—	3·42¼	3 11¾	119 2	4 5¾
„ 18	56·25	1 6¾	—	3·44¾	3 9⅝	118 9	4 3⅝
Dec. 2	57·30	1 6	—	3·48⅞	3 5	117 5	3 8⅝
„ 16	58·90	1 4½	—	3·50¼	3 1⅜	117 10	3 6⅝
„ 30	59·60	1 4½	—	3·53¾	3 2¼	116 9	3 7

* Rate for previous day.

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BANK OF ENGLAND.

Pursuant to the Act 7th and 8th Victoria, cap. 32 (1844),

[000 omitted.]

1	2	3	4	5	6	7
Issue Department.					Collateral Columns.	
Liabilities.		Assets.				
Notes Issued.	Dates. (Wednesdays.)	Government Debt.	Other Securities.	Gold Coin and Bullion.	Notes in Hands of Public. (Col. 1 minus col. 16.)	Minimum Rates of Discount at Bank of England.
£	1920.	£	£	£	£	Per cent.
108,742	Jan. 7	11,015	7,434	90,292	90,347	6
111,790	„ 14	11,015	7,434	93,340	88,249	
114,346	„ 21	11,015	7,434	95,896	88,094	
117,513	„ 28	11,015	7,434	99,063	88,257	
120,728	Feb. 4	11,015	7,434	102,278	89,323	
123,682	„ 11	11,015	7,434	105,232	89,976	
126,186	„ 18	11,015	7,434	107,736	93,646	
128,163	„ 25	11,015	7,434	109,713	96,526	
131,360	Mar. 3	11,015	7,434	112,910	101,154	
133,799	„ 10	11,015	7,434	115,349	102,887	
136,110	„ 17	11,015	7,434	117,660	101,171	
133,659	„ 24	11,015	7,434	115,209	101,136	
130,096	„ 31	11,015	7,434	111,646	105,271	
130,107	April 7	11,015	7,434	111,657	106,810	
130,434	„ 14	11,015	7,434	111,984	106,018	
130,486	„ 21	11,015	7,434	111,986	105,963	7 (Apr. 15)
130,486	„ 28	11,015	7,434	111,986	107,883	
130,488	May 5	11,015	7,434	111,988	111,115	
130,442	„ 12	11,015	7,434	111,992	111,312	
130,444	„ 19	11,015	7,434	111,994	110,881	
130,444	„ 26	11,015	7,434	111,994	111,464	
132,370	June 2	11,015	7,434	113,920	113,806	
134,329	„ 9	11,015	7,434	115,879	114,367	
135,179	„ 16	11,015	7,434	116,729	114,165	
135,185	„ 23	11,015	7,434	116,735	115,240	
135,187	„ 30	11,015	7,434	116,737	120,057	
137,935	July 7	11,015	7,434	119,485	122,274	
139,919	„ 14	11,015	7,434	121,469	124,237	
139,920	„ 21	11,015	7,434	121,470	124,098	
139,923	„ 28	11,015	7,434	121,473	125,369	
139,979	Aug. 4	11,015	7,434	121,529	126,489	
139,980	„ 11	11,015	7,434	121,530	125,527	
139,982	„ 18	11,015	7,434	121,532	124,844	
139,982	„ 25	11,015	7,434	121,532	124,893	
140,002	Sept. 1	11,015	7,434	121,552	126,532	
140,005	„ 8	11,015	7,434	121,555	125,908	
140,007	„ 15	11,015	7,434	121,557	125,164	
140,008	„ 22	11,015	7,434	121,558	125,486	
140,018	„ 29	11,015	7,434	121,568	127,490	
140,119	Oct. 6	11,015	7,434	121,669	127,803	
140,121	„ 13	11,015	7,434	121,671	127,123	
140,128	„ 20	11,015	7,434	121,678	127,053	
140,128	„ 27	11,015	7,434	121,678	127,588	
140,128	Nov. 3	11,015	7,434	121,678	128,437	
140,190	„ 10	11,015	7,434	121,740	127,847	
140,421	„ 17	11,015	7,434	121,971	127,569	
140,779	„ 24	11,015	7,434	122,329	127,964	
141,617	Dec. 1	11,015	7,434	123,167	130,482	
142,524	„ 8	11,015	7,434	124,074	130,411	
143,472	„ 15	11,015	7,434	125,022	131,236	
144,424	„ 22	11,015	7,434	125,974	134,582	
144,934	„ 29	11,015	7,434	126,484	132,851	

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—WEEKLY RETURN.

for Wednesday in each Week; during the Year **1920.**

[000 omitted.]

8	9	10	11	12	13	14	15	16	17	18
BANKING DEPARTMENT.										
Liabilities.						Assets				
Capital and Rest.		Deposits.		Seven Day and other Bills.	Dates. (Wednesdays.)	Securities.		Reserve.		Totals of Liabilities and Assets.
Capital.	Rest.	Public.	Private.			Government.	Other.	Notes.	Gold and Silver Coin.	
£	£	£	£	£	1920.	£	£	£	£	£
14,553	3,278	21,463	137,296	15	Jan. 7	60,941	96,282	18,394	998	176,666
14,553	3,320	18,657	127,434	13	„ 14	54,709	84,780	23,540	946	163,977
14,553	3,347	21,472	140,341	13	„ 21	68,157	84,407	26,252	909	179,727
14,553	3,322	20,116	135,156	12	„ 28	62,683	80,349	29,255	870	173,159
14,553	3,420	18,689	124,560	11	Feb. 4	46,548	82,451	31,405	829	161,235
14,553	3,430	22,012	132,276	15	„ 11	53,947	83,838	33,705	794	172,286
14,553	3,505	26,337	164,811	16	„ 18	87,118	88,800	32,540	764	209,224
14,553	3,509	17,322	172,824	17	„ 25	85,152	90,704	31,637	731	208,226
14,553	3,525	22,438	135,411	16	Mar. 3	52,720	92,331	30,205	687	175,945
14,553	3,533	18,555	127,339	15	„ 10	40,387	92,056	30,912	639	163,995
14,553	3,543	18,419	133,030	15	„ 17	42,059	91,954	34,938	610	169,561
14,553	3,542	19,763	131,757	18	„ 24	45,394	91,142	32,523	573	169,634
14,553	3,539	36,248	100,922	24	„ 31	20,412	109,523	24,825	525	155,287
14,553	3,127	24,978	133,708	16	April 7	59,059	93,550	23,296	487	176,383
14,553	3,107	19,315	122,888	26	„ 14	56,118	79,891	24,416	464	159,891
14,553	3,113	20,046	124,256	25	„ 21	57,475	79,612	24,473	434	161,995
14,553	3,090	17,902	122,478	28	„ 28	59,804	75,164	22,552	531	158,053
14,553	3,107	20,649	116,516	27	May 5	55,309	79,690	19,322	532	154,854
14,553	3,145	21,428	99,404	23	„ 12	38,455	80,444	12,129	526	138,555
14,553	3,162	20,060	101,389	23	„ 19	36,515	82,632	19,562	478	139,188
14,553	3,151	16,603	101,179	25	„ 26	34,356	81,716	18,980	460	135,513
14,553	3,160	21,241	127,322	30	June 2	66,618	80,586	18,564	538	166,307
14,553	3,191	19,440	136,874	19	„ 9	74,499	78,789	19,962	827	174,078
14,553	3,206	21,258	132,553	17	„ 16	70,802	78,812	21,013	960	171,589
14,553	3,257	17,869	118,474	14	„ 23	53,003	80,139	19,945	1,079	154,168
14,553	3,259	15,748	175,966	13	„ 30	90,078	103,188	15,129	1,144	209,541
14,553	3,274	17,886	117,035	14	July 7	52,424	83,894	15,191	1,252	152,763
14,553	3,293	17,671	119,622	12	„ 14	59,438	78,622	15,682	1,409	155,153
14,553	3,305	16,559	119,593	13	„ 21	56,588	80,081	15,821	1,534	154,025
14,553	3,343	15,148	118,650	13	„ 28	59,912	75,481	14,554	1,760	151,708
14,553	3,405	17,462	130,685	16	Aug. 4	76,265	74,788	13,490	1,578	166,123
14,553	3,458	15,999	124,018	15	„ 11	68,250	73,805	14,452	1,537	158,045
14,553	3,493	16,114	117,134	15	„ 18	58,508	76,116	15,137	1,548	151,311
14,553	3,497	15,363	100,591	—	„ 25	41,555	75,883	15,089	1,496	134,023
14,553	3,529	16,433	113,339	19	Sept. 1	57,408	75,467	13,469	1,529	147,874
14,553	3,532	16,500	116,988	13	„ 8	59,628	76,340	14,096	1,522	151,587
14,553	3,529	15,201	122,575	13	„ 15	56,103	83,390	14,843	1,535	155,872
14,553	3,548	16,707	105,447	12	„ 22	35,518	88,722	14,522	1,505	140,269
14,553	3,542	16,139	111,027	11	„ 29	21,888	109,312	12,527	1,546	145,274
14,553	3,072	21,249	134,762	12	Oct. 6	63,789	96,018	12,315	1,526	173,649
14,553	3,128	18,200	123,970	11	„ 13	63,707	81,675	12,998	1,483	159,804
14,553	3,095	16,539	125,844	11	„ 20	61,619	83,678	13,074	1,470	160,043
14,553	3,098	16,420	120,556	11	„ 27	64,517	76,061	12,540	1,520	154,639
14,553	3,157	18,142	115,135	12	Nov. 3	63,972	73,869	11,690	1,467	151,000
14,553	3,152	19,815	112,469	11	„ 10	62,701	73,222	12,342	1,736	150,002
14,553	3,201	19,508	116,278	10	„ 17	63,786	75,165	12,852	1,747	153,552
14,553	3,238	17,989	105,314	9	„ 24	52,401	74,106	12,184	1,783	141,105
14,553	3,308	21,651	126,482	9	Dec. 1	93,896	75,352	11,135	1,823	182,207
14,553	3,334	22,423	126,482	10	„ 8	80,707	72,180	12,113	1,803	166,804
14,553	3,322	19,400	126,069	8	„ 15	77,122	72,206	12,236	1,788	163,354
14,553	3,359	13,769	136,030	8	„ 22	77,177	78,914	9,841	1,786	167,720
14,553	3,339	14,304	175,554	7	„ 29	107,964	86,028	12,083	1,783	207,759

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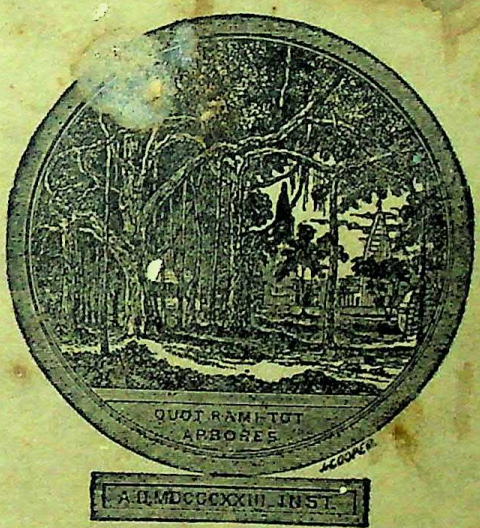
FOURTH QUARTER OCTOBER, 1922

THE JOURNAL OF THE ROYAL ASIATIC SOCIETY OF GREAT BRITAIN AND IRELAND

With which are incorporated the Proceedings of the Society of Biblical Archaeology



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PASSED AT THE SPECIAL GENERAL MEETING OF 4TH JULY, 1922

Lord [illegible]hers, President, in the chair.

Rule 102 *as follows* :—

Societies established *in Asia* for the same objects for which the Society was formed, may, on the recommendation of the Council, be admitted by a vote of a Special General Meeting to be Branch Societies of the Royal Asiatic Society.

Amended wording.

Societies established for the same objects for which the Society was formed, may, on the recommendation of the Council, be admitted by a vote of a Special General Meeting to be Branch Societies of the Royal Asiatic Society.

Rule 103 *as follows* :—

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Amended wording.

Societies established for the same objects for which the Society was formed, may, on the recommendation of the Council, be admitted by vote of a Special General Meeting to be Associate Societies of the Royal Asiatic Society.

Rule 104 *to be deleted.*

Rule 105 *as follows* :—

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Amended wording.

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Wahm in Arabic and its Cognates

BY D. B. MACDONALD

IT may safely be said that every one who has had to do with technical Arabic has had difficulty with *wahm* and its cognates. Some recent investigations have led me to examine the meanings of these in detail and I endeavour in this paper to give my results. It will be understood that this is not a complete lexicographical handling of the whole root, but only an attempt to discover the more technical uses of some of its phases. In the arrangement of the material I fear that I have not always avoided logical cross-division; but the subject is complicated and will call for reading backward as well as forward. Also I make no attempt to trace the origin of these Arabic psychological conceptions, whether in Greek, Syriac, or elsewhere, or to compare them with any parallel conceptions in modern psychology. Such few references as I may make, of the one kind or the other, are simply to illumine *wahm* itself.

I. The classical uses, which must be taken as a basis, can be learned best from the *Siḥāḥ* and the *Lisān* (xvi, pp. 130 f.), Lane's notes on this root in the supplement to his lexicon (p. 3061) are illuminating, but have been slightly affected by medieval and modern usage. In classical usage Stems I, II, IV (both *awhama* and *at-hama*) and VIII occur, and there is

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the following range of meanings: to err; to occur to one's mind while meaning to think of something else; to imagine to be, to guess at, to conjecture; to suspect (some one of . . .); to drop (something) completely out (by error); to be unmindful of, disregard. The *Lisān* equates *tawahhama* with *takhayyala* and *tamaṯṯhala*, evidently in the sense "to imagine to be, to guess at"; also with *tafarrasa*, *tawassama*, and *tabayyana*, evidently in the sense "to scrutinize, investigate". Zuhair's *Mu'allaqa*, l. 4 (cf. 'Antara's *Mu'allaqa*, l. 1) is quoted, and Nöldeke (*Fünf Mo'allaqāt*, ii, p. 15; iii, p. 14) renders these passages with "vermuthen". The *Lisān* says of the noun *wahm* that it is one of the movements (*khaṭarāt*) of the mind; that the mind has a *wahm* which imagines a thing to be such and such, whether the thing exists or not. Also *la wahma min kadha = la budda*, meaning, apparently, "there is no conceivable way out, real or unreal." It is plain, then, that the root indicates sub-conscious or semi-conscious movements of the mind, not under the control of conscious reason, and so liable to error and to sudden lapses of attention. On another side, such *awhām* may give rise to suspicions, founded or unfounded. In all cases the actuality or possibility of error is strongly marked. It is unnecessary to enter upon the uses of *wahm* as an epithet for a road (clear, plain), a camel (big, powerful, well-broken), and a man (powerful); whatever their origin, they have no connexion with the present subject. Finally, with a view to future developments, the equation *tawahhama = takhayyala* is of importance. In the *Qāmūs* (see, too, Lane, *Supplement*, p. 3061*c*), a common and medieval meaning is reached; *wahm*, of two extremes between which one wavers, is that which is outweighed in probability; *ẓann*, on the other hand, is a preponderant opinion, although not absolutely certain (*Lane*, p. 1925*a*).

II. The broad medieval and modern usage may now be sketched. It is to be learned from Lane, *Supplement*; Dozy, *Supplément*; and the lexicons of Hava and Salmoné; opinion

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or idea outweighed in probability; imagination; fancy; conjecture tending to chimera; fear and disquietude; feint in wrestling; the fifth stem is very frequent in the sense "to imagine, fancy" of empty, unreal imagination. Dozy adds the seventh stem from Bocthor, with the meaning "to be preoccupied, prepossessed, prejudiced". Hava adds the seventh and tenth, with the meanings "to be scared, perplexed, afraid (of a child). Hava and Salmoné both equate *wâhm* and "instinct". Ibn Khaldūn, *Prolegomena*, ed. Quatr. iii, 74, l. 3 from below, ii, 77, l. 2 from below; 79, l. 5, uses the fourth stem "to arouse suspicion of something". Horten (*Theologie des Islam*, p. 273) gives a series of usages from theological writers all suggesting error and improbability. Carlos Quirós Rodríguez, in his ed. of Averroes' *Metaphysics* (Madrid, 1919, p. 307) gives *wahmī* as "hipotetico, supuesto, mental". He adds no references, and I have not gone through his text to find them.

III. I now turn to more detailed examination of some uses of *wahm* in philosophy and logic. Al-Ghazzālī, in his *Iljām* (ed. Cairo, 1303, p. 56, ll. 13 ff.) says that *wahmī* proofs are "scholastic (*kalāmīya*), based upon conceded (*musallama*) positions believed because of their notoriety (*ishtihār*) among the great 'Ulamā, and because of the obloquy of denying them and because of natural shrinking from entering upon controversy as to them." "Scholastic," here, refers to the arguments of the mutakallims, the scholastic theologians who upheld the atomic scheme and were opposed by al-Ghazzālī as a Neoplatonic Aristotelian (see article *Kalām* in the Leyden *Encyclopedia of Islam*). This is made clear by al-Ghazzālī himself in his *Miḥakk an-naẓar fi-l-manṭiq* (Cairo, Adabīya, pp. 47 ff. n.d.). In it he divides propositions and judgments in the logical sense (*muqaddimāt, qaḍāyā*) the materials out, of which syllogisms are constructed, according to their origin and certainty, into seven classes. (i) *Awwalīyāt*, "axioms," in exactly our sense; (ii) *Mushāhadāt bāṭina*, "internal observations," e.g. hunger, thirst, fear, joy; (iii) *Maḥsūsāt*

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ẓāhira, "external sense-perceptions," e.g. milk is white, the moon is round; (iv) *Tajarrubīyāt*, "experiments," also called *Iṭṭirād al-ʿādāt*, "regularity of occurrence," our "reign of law", e.g. fire burns, a stone falls in the direction of the earth; (v) *Maʿlūmāt bit-tawātur*, "things known by unanimous tradition," e.g. the acknowledged facts of history and geography; (vi) *Wahmīyāt*, judgments on the part of the *wahm*, see below; (vii) *Mashhūrāt*, "widely spread and known," i.e. conventional principles of conduct (cf. *ishtihār* above).

This analysis, although in a treatise on logic, is evidently psychological and not logical; it deals with the substance (*mādda*) of propositions and not with their form (*ṣūra*). In consequence nothing corresponding with it will be found in such formal treatises on logic as that of Abū-ṣ-Ṣalt of Denia (A.H. 460–529), edited with a Spanish translation by Palencia (Madrid, 1915), or that of Ibn Ṭumlūs of Alcira (d. A.H. 620), edited with a Spanish translation by Asín (Madrid, 1916). But there does occur an even more detailed analysis of a similar kind, giving six classes of certain (*yaqīnī*) propositions and six of uncertain (*ghair yaqīnī*), as an appendix to the *Risāla Shamsīya* on logic of al-Kātibī al-Qazwīnī (d. A.H. 675). This was published by Sprenger with an English translation as an appendix to his invaluable *Dictionary of Technical Terms*; see in it pp. ٢٧ f. and 34 f. There is also an excellent Cairo edition of A.H. 1311, with the commentary of ar-Rāzī (d. A.H. 766) and the *ḥāshiya* on the latter, of al-Jurjānī (d. A.H. 816); see in it pp. 127 ff. Almost the same analysis into six and six is given in a short form in the Īshāghūjī of al-Abharī; it was probably his source; it goes back to the Εισαγωγή of Porphyry. See the collection of *Mutūn* published by the Ḥamīdīya Press, Cairo, 1323, pp. 377 f.

I give these details in order to guard against any idea that the doctrine of *wahmī* propositions was in any way peculiar to Ghazzālī. Al-Abharī, al-Kātibī and ar-Rāzī are in essential

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accord with him. There is no *ḥāshiya* by al-Jurjānī on the passage, but Jurjānī's definitions in his *Ta'rīfāt* (ed. Cairo, 1321, pp. 175 f.) show that his doctrine was the same. To return to al-Ghazzālī—three of the above classes, he says, the *Awwalīyāt*, the *Wahmīyāt*, and the *Mashhūrāt* are alike in being immediate and intuitive; they are reached by no process of consideration or reflection. But the *Awwalīyāt* (axioms) are intuitions of reason (*'aql*), and are therefore certainly true; they are absolute *yaqīnīyāt*. And they depend upon reason only; if a man were to think away from himself everything but reason, the *Awwalīyāt* would remain. The *Mashhūrāt*, on the other hand, would drop away from him; they are a product of environment, teaching, and training, and submission to them is often from a desire of peace and the need of adjusting one's self to one's world. They may thus be true or false; but the firmness with which they are planted in the mind is no proof of their truth. For Muslim writers the standard example of a false *Mashhūra* is the prohibition of the slaughter of domestic animals (*bahā'im*) and of the eating of their flesh. Further, the *Mashhūrāt* differ from the *Wahmīyāt* in that they do not spring from the primary constitution of mankind (*al-fiṭra*; see this in the Leyden *Encyclopedia of Islam*) but from accidental causes. As the *Wahmīyāt* have such an origin it is exceedingly difficult to distinguish between them and the *Awwalīyāt*, and the truth or falsity of each *wahmī* proposition can be discovered only by testing it by means of reason. Sometimes the two classes coincide; it is both a *wahmī* and an *awwalī* proposition that an individual cannot be in two places at the same time. But it is a *wahmī* proposition and false that an entity (*mawjūd*) is always in space and in a direction so that we can point at it. So long as the *wahm* deals with objects of sense (*maḥsūsāt*), as in the mechanical and arithmetical sciences, its judgments are true, for the *wahm* is a corporeal power belonging to man in his animal psyche (*nafs*) and perceives the particulars which are derived from objects of sense. But the *wahm* tries to go

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farther, and deal with things that are not objects of sense as though they were objects of sense, and then its results are false. The *nafs* of man, that is his animal *nafs*, is very directly under the influence of sense and *wahm* and to such an extent that his *nafs* often does not distinguish between the *Wahmīyāt* and the *Awwalīyāt*. So the reason must enter and judge.

It will now be plain, I think, that this *wahm*, thus acting in the animal *nafs* of man, is really the instinctive perception of the lower animals which continues in him, but which he must control by reason and must especially prevent from meddling with super-sensible things and the world of abstract universals generally. Thus it belongs to man's primary constitution; but it can be trusted only within those limits. And just because it belongs to this primary constitution of man al-Ghazzālī is very explicit as to the difficulty in distinguishing between its results and the *Awwalīyāt*. It has led to the position of the sceptics that we can never reach certainty, and that there must always remain a balance or equality (*takāfu'*) of proofs, one against another. But al-Ghazzālī suggests that we might apply doubt as to this very "equality".[1] As for *wahm* he gives two methods of dealing with it. One, a general method, is to apply *wahm* to itself, when it would have to deny itself, as it takes account only of concrete qualities like thickness, amount, colour; or to confront it with such thought-qualities as power, knowledge, will, when it would picture each of them in concrete terms, and if it were obliged to combine these qualities could do it only in terms of space. Thus the general weakness of *wahm* would be exposed. To test the particular cases that may arise, the only way is to use reason and turn one result of *wahm* against another. This method can be put most shortly and simply in an illustration which ar-Rāzī gives. *Wahm* teaches

[1] It will be remembered that the basis of Ghazzālī's pragmatic position was the application of the methods of scepticism to pure metaphysics.

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fear of a dead body; but it also teaches, in agreement with, reason, that a dead body is only a *jamād*, a piece of lifeless matter, and a *jamād* is not to be feared. Thus instinctive attitudes can neutralize one another. Finally, it is clear that al-Ghazzālī considered that the mutakallims made use of untested *wahmī* propositions just as the canon lawyers in their dialectic made use of the *Mashhūrāt*. Thus the mutakallims had a natural shrinking (*nafarat aṭ-ṭab'*) from the saying of the Aristotelians that beyond the world there was neither void nor plenum (*laisa warā' al-'ālam lā khalā' wa-lā malā'*), and taught an infinity of space. This was, of course, because they were atomists (cf. Lucretious, i, 958 ff., and Munro's commentary), but al-Ghazzālī considered it a *wahm* fallacy on their part and brings dialectic against it.

It may be well to add here, with a view to the sequel, that the *Risāla Shamsīya* and ar-Rāzī's commentary thereon, with the Isāghūjī and the *Ta'rīfāt* of Jurjānī give a class of non-certain propositions which are called *Mukhayyalāt*. They are a product of the imagination (*al-khayāl*); by attractive or repulsive metaphors and comparisons they produce in the *nafs* pleasure or disgust, and thus play upon it to stimulate its desires and dislikes; combined in a syllogism they make poetry (*shi'r*), which is aided in its effect on the *nafs* by metre and melody. It will be remembered that the *Lisān* gives *takhayyala* in the classical language as a synonym of *tawahhama*. In logic and psychology they are quite different, but in rhetoric, as we shall see, they again come close to one another. These *Mukhayyalāt* come in oddly in a logical treatise; but their presence there is evidently due to the schematic tendency of scholasticism. "Wine is liquid rubies" is, in form at least, a proposition or judgment; it must, therefore, be possible to use it in a syllogism; poetry, therefore, can be called a syllogism. Al-Ghazzālī, who used scholastic methods, but was not ridden by them, recognized the pathetic fallacy of argument by metaphor; but did not therefore classify poetry under syllogism.

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Also, it may be well to add that there is much more on this analysis of propositions in al-Ghazzālī's *Mi'yār al-'ilm* (ed. Cairo, 1329), which is an introduction to logical analysis and intended to explain his *Tahāfut*. The subject runs through the whole book; but he deals especially on pp. 112 ff. with premises which are not certain and which cannot be used for absolute proof (*burhān*); on pp. 115 ff., pp. 129 ff. with *wahmīyāt*; and on pp. 131 ff., 136 and 142 f. with *wahm*. The book is thus a very remarkable study in practical logic. It gives (pp. 112 ff.) a classification of six kinds of propositions uncertain because of content, which seems to lie behind that of the *Risāla Shamsīya*; but it is not scholastic at all, and is of great value for the clarifying of thought. The six of the *Shamsīya* are (i) *Mashhūrāt* (see above), (ii) *Musallamāt* (admissions for dialectic purposes, (iii) *Maqbūlāt* (beliefs on faith or authority), (iv) *Maẓnūnāt* (fallible opinions and presumptions), (v) *Mukhayyalāt* (see above), (vi) *Wahmīyāt*. Al-Ghazzālī divides his six into two main groups, three which may be used in practical applications of canon law (*fiqh*), but not for absolute demonstration and three which lead only to confusion and error. The first three are (i), (iii), (iv), of the *Shamsīya*; the second three are (vi) of the *Shamsīya* with the weak and erroneous side of (i), (ii), (iv), (v) of the *Shamsīya*, and a class of absolute confusions and mistakes. It will be noticed that he completely rejects the pure *wahm*, i.e. when it is not backed by the reason, as a basis for even the practical questions of canon law.

IV. But to make all this entirely plain it will be necessary to go into further psychological detail, and I have thrown into the form of a comparative table, in chronological order, analyses of the inner senses or powers (*ḥawāss bāṭina, quwā bāṭina*) of the animal soul (*nafs ḥayawānīya*) as given by five authorities. These are (i) Ibn Sīnā (d. A.H. 428), *Hadīyat ar-ra'īs*, ed. by S. Landauer in ZDMG., xxix, pp. 335–418, see especially pp. 358 ff., and by Edward van Dyck, Cairo, A.H. 1325, pp. 51 ff.; (ii) al-Ghazzālī (d. A.H. 505), *Maqāṣid*

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(i)

Ibn Sīnā (d. A.H. 428)

(1) *al-ḥiss al-mushtarak* or *al-mutaṣawwira*, the "common sense" of Aristotle, *αἴσθησις κοινή*.

(2) *al-mutakhayyila* combines and separates not only images gained from external senses but also others, unreal and false. Does not necessarily believe in them.

(3) *al-mutawahhima* or *az-zānna* instinctively derives ideas and judgments from sense perceptions and believes in them. So a sheep gains instinctive fear of a wolf.

(4) *al-ḥāfiẓa* or *al-mutadhakkira* preserves these ideas.

When 3 alone uses 2, as in the lower animals, 3 is called *al-mutakhayyila*; but when reason (*al-'aql*, *al-quwwa an-nāṭiqa*) uses 2, as in man, 2 is called *al-quwwa al-mutafakkira*. This is in the case of *nafs insānī*.

(ii)

al-Ghazzālī (d. A.H. 505)

(1) *al-ḥiss al-mushtarak*.

(2) *al-mutaṣawwira* is a memory to the "common sense".

(3) *al-wahmīya* perceives in the sense percept something that is not a sense percept, as the enmity of the wolf in the wolf. This in the lower animals plays the part of reason in man. The perception is not by the eye, but by another power.

(4) *adh-dhākira* preserves the ideas which 3 gains, just as 2 preserves the pictures got by 1.

(5) *al-mutakhayyila* searches out the pictures and ideas in 2 and 4, combines and separates these and does not invent anything without a previous model (*mithāl*); in man it is called *al-mufakkira*, a term which really means reason (*'aql*), while this *mutakhayyila* is not reason, but only an instrument of reason in its thinking. This process goes on in sleep and is the instrument of remembering by association of ideas.

(iii)

al-Qazwīnī (d. A.H. 682) considers these as powers of the human *nafs*.

(1) *al-ḥiss al-mushtarak*. Perceives also the products of the *mutakhayyila* (5) of the sick or those in fear, i.e. hallucinations.

(2) *al-khayāl* or memory of these.

(3) *al-wahmīya* perceives the "particular" (as opposed to "universal") ideas as connected with sense percepts. You see Zaid, but you perceive by *wahmīya* his truthfulness. De Sacy transl. "l'opinion ou l'instinct".

(4) *al-ḥāfiẓa* preserves these ideas.

(5) *al-mutafakkira* deals with the pictures in 2 and the ideas in 4 by separating and combining. If it obeys reason in so doing, it is called *mutafakkira*; but if it does not it is called *mutakhayyila*.

(iv)

al-Ījī (d. A.H. 756) and al-Jurjānī (d. A.H. 816)

(1) *al-ḥiss al-mushtarak*.

(2) *al-khayāl*.

(3) *al-wahmīya* gives such particular ideas connected with sense percepts as the instincts of animals. al-Ījī says that it is this power which judges that one particular object of sense is a particular object of another sense (e.g. that "this smaller thing is this sweet thing"); but al-Jurjānī urges that the two terms of this proposition are perceived by the "common sense" and the relationship (*nisba*) by the *Wahmīya*, and that, therefore, the power of forming this judgment (*ḥukm*) must be something else which includes all these. He means the reasonable *nafs* itself, which, he maintains, perceives all particulars for itself and not simply universals, as the philosophers held. Evidently the philosophers thought that perceiving a relationship was the same as forming a judgment. This seems to be a form of our eighteenth century problem of empiricism which has reappeared in the radical empiricism of William James.

(4) *al-ḥāfiẓa:*

(5) *al-mutakhayyila*.

(v)

Ibn Khaldūn (d. A.H. 808) (He looks upon these as an ascent by which man rises from the physical (*jismānī*) to the spiritual (*rūḥānī*).

(1) *al-ḥiss al-mushtarak* transmits its impression to 2.

(2) *al-khayāl* presents in the *nafs* the sense percept as it is, only stripped of external matter. Then it mounts to 3 and 4.

(3) *al-wahmīya* perceives ideas connected with individualities (*shakhṣīyāt*). Ibn Khaldūn's examples are partly animal instincts and partly human perceptions of qualities.

(4) *al-ḥāfiẓa*, a storehouse for all percepts, whether *mutakhayyila* or otherwise. All these faculties mount up to 5.

(5) *al-fikr*, thinking, meditating. See, further, on this "ladder", *Religious Attitude and Life in Islam*, pp. 56 ff.

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al-falāsifa, ed. Cairo, 1331, pp. 284 ff.; (iii) al-Qazwīnī (d. A.H. 682). *'Ajā'ib al-makhlūqāt*, ed. Wüstenfeld, pp. 358 f., cf. De Sacy in *Chrest. ar.*, iii, p. 488; (iv) al-Ījī (d. A.H. 756), *Mawāqif*, ed. Būlāq, 1266, with comm. of al-Jurjānī (d. A.H. 816), pp. 433 ff.; (v) Ibn Khaldūn (d. A.H. 808), *Prolegomena*, ed. Quatremère, i, pp. 175 ff., transl. De Slane, i, pp. 199 ff., cf. the present writer's *Religious Attitude and Life in Islam*, pp. 56 ff.

Elsewhere Ibn Sīnā divides between the "common sense" and its memory. His *quwā*, then, are five: (i) the *ḥiss mushtarak*; (ii) the *muṣawwira*, called also *al-khayāl*; (iii) the *mutakhayyila* or *mufakkira*; (iv) the *wahmīya*; (v) the *ḥāfiẓa dhākira*. He calls, also, (i) *banṭāsiyā*, i.e. φαντασία. See Shahrastānī, ed. Cureton, pp. 416 f., ed. on margin of Ibn Ḥazm, Cairo, 1320, iii, pp. 196 f., transl. Haarbrücker, pp. 314 f. and Landauer's note on p. 403 in his article cited above.

V. It may now, perhaps, be simplest to take the application of *wahm* in Magic. Dozy quotes from Humbert, *Guide de la conversation arabe*, p. 33, *wahm* = ombre, spectre. This is modern Algerian Arabic, but Dozy quotes also from the "Vocabulista", medieval Arabic of the east of Spain, the first and fifth stems, constructed with *min* and *fī*, in the meaning "mirari in prestigiis". Combining this, as Dozy suggested, with Ducange's article "miratores", I have no doubt that the reference is to some form of crystal-gazing or the ink mirror as described by Lane, *Modern Egyptians*, chap. xii, and so I conjecture that *tawahhama min . . . fī . . .* meant "to conjure up an appearance to one's self from a certain ritual in regard to a question submitted". But in the *locus classicus*, for Arabic, on this art, in Ibn Khaldūn's *Prolegomena* (ed. Quatr. i, pp. 191 ff., transl. De Slane, i, pp. 218 ff., my *Religious Attitude*, pp. 93 ff.), this term is not used except Quatr. p. 196, l. 9, where it may mean simply "imagine falsely".

There is also a use of *wahm* and *tawahhum*, in the sense of

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instinctive, automatic panic which evidently connects closely with this. Ibn Khaldūn, in his *Prolegomena* (Quatr. iii, 132; De Slane, iii, 182; *Religious Attitude*, p. 116), develops his theory of magic as a psychical force producing physical effects; an influence, that is, of the *nafs insānīya*. He shows by the direct influence which the psyche exerts on its own body, that it can exercise such a power apart from natural and physical causes. Thus joy produces physical warmth. But, still more, the forming a picture to one's self in the *nafs* of something (*taṣawwura nafsānīya*) may cause an instinctive, automatic panic (*wahm* and *tawahhum*), as in the case of one who walks on the top of a wall. His feet do not need more room than when he walks on the ground, but on the wall he is sure to fall, unless this tendency to panic is overcome by practice. This shows that it is an affection of the *nafs* which can, and should, always be disciplined. The theory and position of Shahrastānī (d. A.H. 548), two centuries and a half earlier, had been the same (*Milal wan-niḥal*, ed. Cureton, p. 448, ed. on margin of Ibn Ḥazm, iii, p. 243); this overpowering, instinctive fear he, too, calls *wahm*. Further, he, too, is dealing with magic, in this case the magic of Indian ascetics, and he calls them "people of *wahm* and meditation (*fikr*)."[1]

Ibn Khaldun does not seem, as I have said, to use *wahm* of the magical power; but he does use *fikr* of the "meditation" by an augur on birds or animals before giving his decision (Quatr. i, p. 195; De Slane, i, p. 222). Al-Bērūnī (d. 440), in his *India* (chap. vii) discusses the same phenomena and methods at greater length and in a more abstract and philosophical manner; his word for the essential "meditation" is *fikr*, and I do not think he uses *wahm*. But Mas'ūdī (d. 345), in his *Murūj* (Paris ed. ii, pp. 266 f.), in dealing with Alexander in India and a magical cup which he found there, speaks of a science of *tawahhum* which the Indian sages asserted that they possessed. Still earlier Ibn

[1] Professor M. H. Ananikian drew my attention to this passage.

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Khurdādhbih (wrote betw. 230 and 234) gave, in his *Masālik wal-mamālik* (Bibl. Geogr. Arab. vi, pp. vi f.) a statement that the people of India asserted that they possessed *al-wahm wal-fikr* and so could loose and bind, hurt and help, produce puzzling "appearances" (*takhāyīl*), which we now call "visual hallucinations", keep off rain and hail and make poison innocuous; generally do by spells whatever they wished. In the *Fihrist* (completed by 400) the second *Fann* of the fourth *Maqāla* is devoted to magic in the broadest sense. In it we are told (p. 309, l. 12) "the Indians especially possess the science of *tawahhum*; they have books on it, some of which have been translated into Arabic." On p. 312, ll. 24 f., a certain Indian is mentioned whose name in the MSS. is illegible, and it is said: "He was of the ancients and his method in enchantments (*nīranjāt*, a very broad word) was that of the Indians; there is a book by him in which he follows the course of the people of *tawahhum*." Finally, Ibn Baṭṭūṭa (d. 779) gives details of wonders he had seen in India and China. He is a good witness as to facts just because of his Pepys-like quality of detailed truthfulness, however the story might bear upon himself; but it is also to be remembered that he had a great liking for miracles of saints (*karāmāt*), even of the most insignificant character. He was prepared to meet the supernatural at any time. So he had several adventures with Yogis, whom he calls *Jūkīya* and whom, because of their wonders, he feels compelled to regard as crypto-Muslims (Paris ed., vol. iv, pp. 72 and 277 ff.). On the second of these two occasions he is told a story about the yogi in question, for him a Muslim Shaykh, which is a straight case of hypnotic suggestion like that told by Lane at the end of note 15 to chapter i of his *Arabian Nights*. A phrase used by the narrator is worth notice in this context: *fa-khuyyila lī 'annī*, "then there was made to appear to me that I . . ."; compare *takhāyīl* above. But Ibn Baṭṭūṭa had no theory about all this; it was only part of the constant supernatural with which life, for him, was surrounded. So

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when he uses the word *wahm*, as he does at least twice, it is of instinctive, automatic panic. On one occasion (iv, pp. 38 f.) it is when a yogi raises himself into the air, squatting there cross-legged (*mutarabbi'*). Ibn Baṭṭūṭa falls fainting with *wahm* and palpitation of the heart (*khafaqān al-qalb*). The same palpitation of the heart is produced by a juggler (*musha-'widh*) in China (iv, pp. 290 ff.), who performs the rope trick, but on that occasion he does not speak of *wahm*, perhaps by accident. His other use of *wahm* is for the fear at looking down a deep cliff in climbing Adam's Peak in Ceylon (iv, 180); this is like the illustration given by Ibn Khaldūn.

In all this the interesting point is the association of *wahm*, on the one hand, with automatic instinct and, on the other, with intentional meditation (*fikr*); the animal connecting with the rational. It will be remembered, from the psychological tables given above, that the *quwwa mutakhayyila* searches out and works with the memory pictures contributed by the "common sense" and the ideas drawn by the *quwwa wahmīya*. But when this goes on in the mind of a man and not of an animal—that is, is under the rule of reason (*'aql, quwwa nāṭiqa*)—this power is called the *quwwa mufakkira* or *mutafakkira*, "the meditative power," not the *quwwa mutakhayyila*, "the power that produces for itself appearances." So, as man is both an animal (*ḥayawān*) and rational (*nāṭiq*), both *wahm*, simply reproductive and non-creative imagination, and *fikr*, intentional meditation, are at work in him. Thus "imagination" may often be used as a rendering of *wahm*, if we are careful to exclude the Coleridgean use of that word.

VI. This leads naturally to *wahm* in Rhetoric. I draw upon Garcin de Tassy's *Rhétorique et Prosodie des Langues de l'Orient musulman*, ii ed., 1873; A. F. Mehren's *Die Rhetorik der Araber*, 1853; Friedrich Rückert's *Grammatik, Poetik und Rhetorik der Perser*, 1874, which are all based on very careful use of the native manuals and render it unnecessary to go back to these. The first use is an ordinary development

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of the meaning of *wahm* as a deceptive illusion. *'Īhām* means literally "to produce a deceptive illusion," it may be of contrast (*taḍādd*) or of relation (*tanāsub*). A word has two meanings, one common and the other rare; you are led up to the word in such a manner that you expect the common meaning; *'īhām* is, then, to use it in the rare sense (De Tassy, pp. 81, 83, 85, 90, 112; Mehren gives four varieties and also *tawhīm*, pp. 99, 101, 105–7, 177; Rückert, pp. 279–85). Compare, also, in Dozy (*Suppl.*, ii, 846*a*), *'īhāmāt*, "writings which are said to exist; but which do not exist in reality."

The second use is a division of Comparison (*tashbīh*) into *khayālī* and *wahmī*. A *khayālī* comparison is the building up of a new compound out of memory-pictures of objects of the senses; the picture is thus strictly sensuous (*hissī*), although it as a whole may never have been a sense object. A *wahmī* comparison, on the other hand, is mental (*'aqlī*) for its elements, even, have never been perceived by the senses. The standard example of the first is to compare red anemones swaying in the wind to flags made of rubies on lances of chrysolite; and of the second, to compare sharp blue arrow points to the dog-teeth of ghūls (De Tassy, pp. 9, 10, 11, 13, 23; Mehren, pp. 20, 21, 58, 72). Rückert does not seem to have found anything corresponding to this in his Persian authorities. The origin of this distinction is plain in the psychological tables given above. The *khayāl* is the memory which treasures up pictures of sense percepts, while the memory connected with the *wahm* preserves particular ideas which have never been sense percepts, but which have been gained by an internal sense, the *quwwa wahmīya*, from sense percepts. So this is apparently an attempt at stating a kind of sensuous imagination which yet does not use sense pictures and is ultra-rational.

VII. In Mysticism there are at least two uses, one of which is quite clear, while the other is by no means clear. Ibn Khaldūn in his *Prolegomena* gives, as we have seen, for the ordinary meaning of *wahm*, that it is one of the perceptions

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(*'idrākāt*) leading to knowledge of different kinds (*'ulūm, ma'ārif*), which perceptions are classified as "certain" (*yaqīn*), "fallible opinion" (*ẓann*), "doubt," (*shakk*) and *wahm*. See further, and especially, Quatremère's text, iii, p. 60, l. 4, from below, p. 68, l. 8, p. 72, l. 2. From the context *wahm* appears, in these cases, to mean "instinctive perception", as also *tawahhum*, p. 72, l. 8. But he explicitly distinguishes from this general use a usage peculiar to the absolutely pantheistic Ṣūfīs (*ahl al-waḥda al-muṭlaqa*). These use the term *wahm* and its plural *awhām* in the sense of "pure illusions" (ed. Quatr. iii, p. 68, l. 8; De Slane, iii, p. 97; ed. Quatr. iii, p. 72, l. 1), applying it to the objects of the senses and of reason, the real separate identities of which (*al-ghairīya*) they deny.

The other use in Mysticism is exceedingly obscure because it belongs, on one side, to those "fables and endless genealogies which", as St. Paul says, "minister questions"; and, on another, to the realities reached after by emotional religious experience. The origin, both in Christendom and in Islam, was the one and same Gnosticism. In Islam there had grown up a doctrine of the Person of Muḥammad, that he was the first created of all creatures, and that from him all other creatures were produced. This is given in greatest detail—it cannot be said, in greatest clarity—in the *Insān al-kāmil* of al-Jīlī, which has been so admirably analysed by Dr. R. A. Nicholson in his *Studies in Islamic Mysticism*, chapter ii. I have not access to al-Jīlī's Arabic text, but the essential parts, for my present purpose, are given in the *Dictionary of Technical Terms*, pp. 1513 f. I put together what follows partly from Dr. Nicholson's statement and partly from the quotations given in the *Dictionary*. The doctrine is: while God produced all created things from the Spirit (*rūḥ*) and Light (*nūr*) of Muḥammad, He produced especially certain beings from certain faculties (*quwā*) of Muḥammad. The statement of these faculties is confused and contradictory and agrees only in part with the psychological scheme given above.

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But the *wahm* stands out amongst them. It, in Muḥammad, was created from Allah's name *al-Kāmil*, "the Perfect One," and from Muḥammad's *wahm* was created in turn Azrael, the Angel of Death. These three things—the Perfection of Allah, the *wahm* of Muḥammad and Azrael are essentially related. The Light of the Perfection of Allah is manifested in existence in Muḥammad, in "the garment of subjugation" (*qahr*); the faculty *al-wahm* overcomes all the others, reason (*al-'aql*), meditation (*al-fikr*); the picturing power (*al-muṣawwira*), and the perceptive power (*al-mudrika*); and Azrael is the most powerful of the angels. That is shown in the fact that he was the only one of the angels who was able to wring from the unwilling earth that portion of her which was needed to be formed into Adam. Further, that portion, so taken, was the soul (*rūḥ*) of the earth, and from that "soul" God made the body (*jasad*) of Adam. Therefore, again, it falls to Azrael to draw forth from men their souls at death.

Again, Allah has made the *wahm* the mirror of Himself and the place where His holiness is manifested; there is nothing in the world swifter of perception than it; it controls all existing things; through it the world serves Allah; in the Light of it He looked upon Adam; through it he who walks on the water or flies in the air does those things; it is the sure light and the source of mastership and authority; if anyone dominates this Light and rules over it he can control all existence, upper and lower; but if the *wahm* dominates him it plays with him and he wanders in perplexed obscurity through its light.

A good deal more follows, in the *Dictionary*, quoted from al-Jīlī, but some points of contact with the psychological scheme given above will have become plain. *Wahm* in the sense of instinctive perception and understanding appears here again. The whole world looks back to God through this power which He has implanted in it. The lower animals worship in their degree, for they, too, possess this *wahm*. In man it rises to consciousness and becomes meditation;

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man in this is "Nature's priest". Further, we have seen that if a man is walking on some narrow edge and *wahm* seizes him—that is, if he cannot control his *wahm*—it makes him fall. Here, conversely, through the strength of his *wahm*, when he controls it, he can do these miraculous things. This comes very close to our concept of "faith", the power which puts an idea before one in such a way that it becomes absolutely certain and real, a primitive fact, "the substance of things hoped for, the evidence of things not seen." By faith ye shall remove mountains; by faith Peter walked upon the water.

But, again, this *wahm* must be strictly controlled; it is a good servant but a bad master. In that it is like the *nafs*, the appetitive soul, which Allah has put into man and the rule and discipline of which Allah has imposed upon man. It is part of the symmetrical structure of man that in his created nature lie hidden both his vices and his godly fear; Allah has made man "gulp down" his *nafs* with all these things in it (Qur. xci, 7, 8; xcv, 5). On this see *Ilhām* in the Leyden *Encyclopedia of Islam* and my *Religious Attitude*, pp. 228 ff.

That there has been some obscure contamination of meanings between *wahm* and *'ilhām*, seems to me almost certain; *'ilhām* and *'īhām* especially, would suggest one another. But their origins were entirely different. The source of *wahm* I have traced above in I; the source of *'ilhām* is the ἅπαξ λεγόμενον in Qur. xci, 8, *fa'alhamaha*. Both come together in "created instinct".

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Remarks on the Text of the Prose Refutations of S. Ephrem

By A. MINGANA

THE publication in two volumes by the "Text and Translation Society" of *S. Ephraim's Prose Refutation of Mani, Marcion, and Bardaiṣān* (1912–21) is an event in Syriac literature. Ephrem is the greatest Father of all the Syrian churches, and these two volumes contain, from the point of view of a modern scholar and theologian, the cream of his polemical writings. It was only two years ago that the Pope, as head of the Catholic Church, promoted the "Edessene Deacon" to the rank of a Doctor of the Universal Church, i.e. for all practical purposes, to the rank of a Thomas Aquinas.

I believe that these two volumes will give rise to some future studies, and for many reasons I do not want to be the last to show a keen interest in the precious remains they contain. As, however, most of the points pregnant with interest to the theologian and heresiographer have been analysed by Professor Burkitt in his interesting "Introductory Essay", nothing is left to us for the present but to deal exclusively with the text, which is, after all, the ultimate touchstone of every theory.

The vast majority of Ephrem's known Syriac works are written in metrical poetry, and his only prose works are stray commentaries upon some books of the Old Testament. Apart, therefore, from any other consideration, in view of the preponderating authority possessed by Ephrem in Syriac literature in general, the volumes under review are a welcome addition to our knowledge. A word or an expression used by Ephrem is more likely to be accepted by Syrians than one used by any other known writer, because he is to Syriac more than what Cicero is to Latin or Homer to Greek. In the following pages I have ventured to put together a few remarks

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which, I think, will be found useful to Syriac students who wish to make a thorough study of the present works of Ephrem.

So far as orthography and phonetics are concerned, the MS. seems to have been written at a time when most of the elaborate rules dealing with the *puḥḥāmés*—or rhetorical signs and intonation marks of the Syrian Masora—and with the diacritical points distinguishing the different meanings of words, were fixed by the schools of Edessa and Nisibin. We will only draw attention to the following points[1] :—

The otiose *alaph* prefixed to words beginning with a quiescent consonant is sometimes found, e.g. ܐܪ̈ܩܝܥܝܢ (ii, 204, 46), and this is the case even when a servile letter precedes the *alaph*, e.g. ܕܒܐܪ̈ܓܝܓܬܐ (i, 177, 21), ܠܐܪܘܚܬܐ (ii, 35, 37). In the beginning of the assimilated verbs a *yodh* is generally used, e.g. ܝܠܦ (ii, 141, 5), but sometimes an *alaph* precedes the *yodh*, e.g. ܐܝܠܦܬܘܢ (ii, 119, 25), and this even occurs when a letter precedes this otiose *alaph*, e.g. ܘܐܝܕܥܐ (ii, 140, 8). In the *hamzed* verbs the *alaph* is occasionally dropped when preceded by a servile letter, e.g. ܡܬܝܬܐ (ii, 138, 37). In the defective verbs the *alaph* appearing in the conjugation with the objective pronouns is sometimes changed into *yodh*, e.g. ܚܙܝܘܗܝ (ii, 35, 31). About this anomaly see my Syriac Grammar, No. 479, c/.

The 3rd pers. fem. plur. of the past tense has never an erroneous *yodh*, termed the "West Syrian copyist's *yodh*"; the same may be said of the 3rd pers. fem. sing. of the aorist. In this connexion I wish Nöldeke had not forgotten in his Syriac Grammar, which is the most used in this country, to warn students against the use of this *yodh*, because one occasionally meets with scholars who want to insert this *yodh* even when happily omitted by a shrewd scribe. See my Grammar, Nos. 194, 204, 483.

[1] In our nomenclature we generally follow the Eastern (Arabic) and not the Western (Greek) terminology. In the references the first number indicates the volume, the second the page, and the third the line.

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At the end of a line, as the Syrians had no hyphen to divide a word into two, the enclitic pronouns and the paragogical *tau* and *alaph* are often omitted, and are to be supplied by the reader, e.g. [ܬ]ܡܟܬܒܢ (ii, 54, 2).

In the concave verbs the passive form is throughout written sometimes with one *tau* and sometimes with two, in a most confusing manner, e.g. ܢܬܝܠܕ (ii, 21, 16), but ܢܬܝܠܕ three lines below. I hope Mitchell was careful to reproduce in this case the exact spelling of the MS. The same irregularity occurs with some foreign words, e.g. ܐܢܛܝܘܟ ܕܝ (ii, 51, 29), but ܐܢܛܝܘܟ ܕܝ (ii, 52, 5). Apart from these remarks, the Syriac orthography used in the MS. is of a noteworthy uniformity.

In the domain of syntax I have noted some characteristic points worthy of consideration :—

Ephrem makes frequent use of expletive particles somewhat like Timothy, the Patriarch, e.g. ܕܢ ܐܡܪ ܠܗ ܒܝ ܐܢܫ ܕ ... ܕ (ii, 68, 5–6), ܕ ... ܕ ܐܡܪ ܠܗ ܒܝ ܐܢܫ[1] (ii, 210, 43). The expletive use of the pronoun ܗܘ (with a silent ܐ) is also met with, e.g. ܗܘ ܗܘ ܐܡܪ ܠܗ ܒܝ ܗܘ ܗܘ ܕܒܥܐ (ii, 209, 10). See my Grammar, No. 517. This is considered to be one of the stylistic methods of the famous Philoxenus of Hierapolis. Further, the pronouns and the verb ܗܘܐ are used frequently in a sentence, mostly in a corroborative sense ; see good examples in ii, 66, 30–45 ; we will quote here one example from p. 53, l. 11 of the same volume : ܐܢܐ ܗܘ ܐܢܐ ܗܘ. These pronouns are sometimes used even after the relative pronouns and the substantives to which they belong, and before the subject, e.g. ܕܐ ܕܒ ܗܘ ܐܢܐ ܗܘ ... (ii, 140, 35).

The aorist is used sometimes with the conjugated verb ܗܘܐ to denote the conditional pluperfect expressing past or future action, e.g. ܐܢ ܕܐ ܗܘ ܐܢ ܕܐ ... (ii, 132, 1), ... ܗܘ ... ܕܐ (ii, 205, 15–16).

[1] Too much stress should not be laid on the value of this particle as quotation mark, because it is very often used expletively only.

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Ephrem, like many other Syrian writers (such as Narsai), is fond of continually repeating the same word and the same sentence in order to draw special attention to the meaning conveyed by them, but without antithesis,[1] e.g. see the repetition of the words ܠܝܬ and ܐܝܟܐ in ii, 80. There are, however, several passages in which the style is concisely cut short and almost elliptical, e.g. ܒܗ ܕܐܝܬ ܠܝ ܒܝ ܕܐܝܬ ܠܝ ܒܗ ܕܠܝܬ ܠܝ ܒܝ ܕܠܝܬ ܠܝ ܒܗ (ii, 201, 18–21).

The negative particle ܠ is used somewhat expletively in the following sentence: ܠܐ ܒܝ ܕܐܝܬ ܠܐ ܒܝ ܕܠܝܬ ܠܐ ܒܗ ܕܠܝܬ (ii, 31, 43–4). This peculiarity is noted in Nöldeke's Grammar (§ 267) and in Manna's *Vocabulaire* (p. 365), but I did not want to register it in my Grammar because I was not able to find a good example of its use in an authoritative Syrian writer; the above sentence justifies the legitimate expletive use of this particle. For the sake of emphasis the particle *wau* is also used redundantly before the first verb, but in a much lesser degree than in the Syriac translation of the *Psalms of Solomon*,[2] e.g. ܘܐܡܪ ܘܐܡܪ ܘܐܡܪ ܘܐܡܪ ܘܐܡܪ (ii, 209, 31–3).

The rule that I gave in my Grammar (No. 405, 4°) concerning the plurality of subjects placed after the verb is fully justified by Ephrem, e.g. ܐܝܟ ܐܢܫ ܕܐܝܬ ܠܗ ܒܝ ܕܐܝܬ ܠܗ ܒܝ ܕܐܝܬ ܠܗ (ii, 199, 45–7). On the other hand, if Mitchell's reading of ܕܐܝܬ ܠܗ (ii, 220, 22) instead of ܕܐܝܬ ܠܝ is correct (and I personally think it is not) the rule 336 of my Grammar is to be changed accordingly.

In the domain of lexicography the use of the following words and expressions should be noted:—

ܕܐܝܬ ܕܐ (i, 29, 32) instead of ܕܐ, in the sense of "to fight, to struggle".

[1] This point is sufficiently emphasized in my edition of the works of Narsai. See vol. i, cap. iv of the Latin Introduction.

[2] Attention has been drawn to this point in our new book *Odes and Psalms of Solomon*, vol. ii, p. 109.

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ܐܚܕܐ ܥܠ (i, 35, 9 and 41) " to be incumbent upon ".

ܕܡܐ ܛܒ (i, 45, 19–20) " however much, notwithstanding ". In i, 61, 24–5 the expression ܥܡ ܗܕܐ ܕ is also used in this sense and in that of " in spite of ", somewhat like ܟܕ ܛܒ.

ܚܐܪ ܕ (i, 65, 23–4) " to suffer to, to allow ".

ܗܦܟܬܐ (i, 78, 12) adverbially expresses the idea of " the contrary ".

ܡܬܘܡܐ (always in plural) is frequently used (see the index) in the sense of " entity, constituent parts ".

ܐܣܝܪܐ is used frequently (see the same index) in one of the following meanings: " not free; compact; not interchangeable; incompatible " (because already " bound " to some other thing).

ܐܩܝܡ ܥܠ (i, 99, 47) " to stand by something, to resort to it as an argument ", like ܩܡ. The reading ܢܩܝܡܘܢ may, however, be a mistake for ܢܩܘܡܘܢ.

ܚܪܒܐ (i, 143, 35 and 41) is used of fruits which have deteriorated, decayed, or rotted (not dried); cf. vulg. Arab. خربان.

ܐܠܐ (ii, 87, 7 and 34). I believed formerly that the occurrence of this particle in the Curet. Version of Matth. xi, 6 was a scribe's error for ܕܠܐ, but if Mitchell's reading is correct (and the palimpsest seems here to be legible) we must reluctantly admit that this might have been also the reading of the *Diatessaron*. See Epiphanius (*Haer.* 324) quoted in n. 1, p. xxxix.

ܡܬܢܚ ܥܠ (i, 178, 7) " to be pleased with ", instead of ܠ or ܒ.

ܐܫܬܘܕܝ ܥܠ (ii, 2, 39) " to venture upon ". But the *dalath* may here be a mistake for a *raish*.

ܩܢܘܡܐ ܓܪܡܢܝܐ (ii, 19, 22) " material substance " of animals.

ܦܘܩܐ (the orthography is correct, the name of unity being ܦܘܩܬܐ) " clefts " of mountains (ii, 36, 6).

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ܐܢ ܠܐ ܐܢ (ii, 43, 27; ii, 46, 40) "not the same". It is useful also to remark that in a corroborative sentence ܐܢ ܐܢ have been used (curiously enough) in plural, in an impersonal sense, e.g. ܐܢ ܐܢ ܡܗܦܟܢܐ (ii, 50, 7).

ܡܗܦܟܢܐ (ii, 50 seq.) "heresies, heretics".

ܠܐ ܕܒܪ ܠܗ ܟܕ (ii, 76, 5) "It did not become him" (the reading is correct).

ܡܟܫ ܟܫܐܠܐ (ii, 96, 23) "to confute a question".

ܐܟܝ and ܩܛ. These two verbs have been used before the principal verb to express "continuity of action" just as if they were placed after it. See examples in ii, 113, 5–6, and ii, 209, 39–40.

ܕ ܕܝܢ ܒ (ii, 116, 13) "being aware of".

ܡܟܫܝܪ ܠܗܕ (ii, 142, 11) "an occasion (lit. opening) for argument, plea, excuse", from the emphatic form ܐܗܕܝܠ. For the use of the first member of the compound see *Thesaurus*.

ܨܒܥ (ii, 36, 1) "goldsmith".

ܡܚܨܦ ܒܝܬ (i, 94, 40) "quarry".

Mitchell's decipherment, in view of the magnitude of the task, is to be considered a great success, and Professor Burkitt, who has verified his readings in many places, bears witness to his conscientious work; but we would be somewhat minimizing this gigantic task of Mitchell's (whose premature death every Syriac scholar will deplore) were we to assume that not a single misreading occurs in the two volumes of text. In the course of my reading I came across some words which, if read with a slight change, would, in my opinion, improve the reading of these ancient Ephremic relics. *Sint in exemp.*

In vol ii.

p. 11, 29	read	ܠܗܟ	for	ܠܗܟ
p. 20, 28	,,	ܡܒܒ	,,	ܡܒܒ
p. 43, 12	,,	ܗܕ	,,	ܗܕ
p. 67, 17	,,	ܗ:ܨ	,,	ܗ:ܨ

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p. 107, 1	read	ܙܟܝܐ	for	ܙܟܝܠ
p. 140, 37	,,	ܐܬܕܙܙ	,,	ܐܬܕܙܝ
p. 158, 38	,,	ܡܟܟܝܢܘܢ	,,	ܡܟܟܝܢܘܢ
p. 163, 16	,,	ܡܟܝܐ	,,	ܡܟܠ
p. 220, 19	,,	ܕܡܟܟܝܢ	,,	ܕܡܟܟܝܢ

There are also a few misprints which any intelligent reader can correct, such as ܐܐ for ܐܕ (202, 3), ܐܐܙܐ (p. clxvi, 22) for ܐܐܕܐ (82, 22), and some erroneous interchanges of the diacritical points of *dalath* and *raish*, and the suffix ܐ. A word of which the reader should beware is the un-Syriac ܕܡܟܐ repeated in the index (p. clxiv) from an apparently erroneous reading of ܕܟܐ as ܕܡܟܐ in p. 142, 10.

In vol. i.

p. 39, 33	read	ܗܗܙܐ	for	ܗܗܟܐ
p. 54, 44	,,	ܗܘܗܘܙ	,,	ܗܘܗܘܙ
p. 55, 1	,,	ܗܘܗ	,,	ܗܘܗ
p. 83, 27	,,	ܙܗܗܘ	,,	ܙܗܗܟ

p. 91, 40 and 34, read ܒܝܬܐ[1] (sepulchres, ناووس) and not ܒܝܬܐ (souls).

p. 105, 16	read	ܡܬܝܐ	for	ܡܐ
p. 132, 22	,,	ܕܙܟܐ	,,	ܕܙܟܐ

There are also some misprints, such as ܐܐܟܐ (48, 6) for ܐܐܟܐ, ܐܟܟ (49, 37) for ܐܟܟ, ܐܟܟܙ (50, 16) for ܐܟܟܙ, ܐܐܕܟ (85, 2) for ܐܐܕܟ, ܐܟ (151, 23) for ܐܟ, and a few others which a Syriac reader can easily correct. The same may be said of some slight grammatical mistakes that have surreptitiously crept into the text of the two volumes.

I wish I had been able to throw some light on the word ܐܙܟܐ (ii, 138, 38; 139, 2), which Professor Burkitt tells me is quite legible, especially with the reagent. The word is very obscure, and to the hypothesis of Professor Burkitt

[1] Some copyists have, however, written it with a *pé* in an East Syrian way.

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I can only add another hypothesis, and compare it with Arab. رباط (adapted by means of a servile *alaph* at the beginning, as above).

Another doubtful word is ܡܥܘܢܐ, which Mitchell saw appearing in i, 161, 26; ii, 164, 36, and 204, 45. The word is very strange, and I cannot induce myself to recommend its insertion in any future Syriac dictionary. I should, therefore, propose a correction into ܡܠܘܟܐ or ܡܥܠܢܐ, which suit the context.

A word must be said about the proper name ܝܫܘ given to Jesus in the Marcionite Gospel. Mitchell and Burkitt rightly derive it from the Greek form *'Ιησοῦ*, but whether it was pronounced *Yésu* or *Isu* cannot be clearly established, and thus no light is thrown through it upon the controversy raging between the East and the West Syrians concerning the right pronunciation of the Syriac name of Jesus (see Manna's *Vocabulaire*, p. 13). The West Syrians resort in their pleading to the Greek form of the name and to the Hebrew pronunciation of Joshua (*Yeshua'*), and the East Syrians to the fact that the "Song of Light" (an acrostic and metrical[1] hymn of Ephrem, formed from the letters ܝܫܘܥ ܡܫܝܚܐ) implies an *alaph* after the *yodh*, and this *alaph* is used by them in a small form over all words beginning with a *yodh* having an homogeneous vowel, something similar to the "chair" of the *hamza* among the Arabs. See my Grammar, No. 43.

Finally, we must note in passing that Mitchell read in three places the word ܟܦܪܐ (i, 40, 27; 73, 6 and 12), which he translated by "sepulchral vault". The Syriac word has never had such a meaning and no lexicographer will ever dare register it with such a sense, because it is clearly a

[1] Syriac poetry is to be read according to the poetical licences, a good summary of which is found in Joseph David's Grammar and in my own.

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mis-reading of ܐܪܥܐ "earth, soil", which is in perfect harmony with the context.

While sincerely thanking Mr. Mitchell and Professors Burkitt and Bevan for the real service they have rendered to Syriac literature, I am not disposed to modify the severity of Wright's verdict on "the miserable monk Aaron" until, through some future chemical or physical process, every Ephremic word on the palimpsest has been clearly read and translated.

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Note on the Padmasana

By R. E. ENTHOVEN, C.I.E.

On p. 174 of the late Dr. King's *History of Sumer and Akkad* there is reproduced the design of a cylinder seal of Lugalanda, the patesi of Lagash. In his chronological list in Appendix II to this volume, Dr. King gives the date of Lugalanda as *circa* 2850 B.C. In the centre of the seal design will be noted a curious geometrical pattern, to which the following reference is made on p. 176 :—

"Another peculiarity which may here be referred to is the employment on the larger seal, below the inscription, of a sort of arabesque pattern, an ingenious and symmetrical combination of straight lines and curves, the course of which may be followed without once passing along the same line a second time."

Dr. King suggests that the design may be a religious symbol or merely decorative, to fill in the empty space. It is, however, a very well-known design in India, where it is called the Padmásana, and is in common use at the present day.

Rao Bahádur P. B. Joshi, whose attention was drawn by me to the use of this design on an early Sumerian seal, gives the following description of the Padmásana :—

The figure known as Padmásana is considered very sacred by Hindus, and more especially by Hindu women. It is supposed to bring good luck and prosperity, and, therefore, on all auspicious occasions, such as a wedding, thread-girding, house-warming, *Mahápujás*, etc., the figure is usually drawn in red and white powder by the ladies of the household. This is done before the host and the priest take their seats. On the Padmásana the women place low wooden stools ; and on these, again, woollen *ásanas* (i.e. coverings), upon which the host and priest sit while the auspicious ceremonies are performed.

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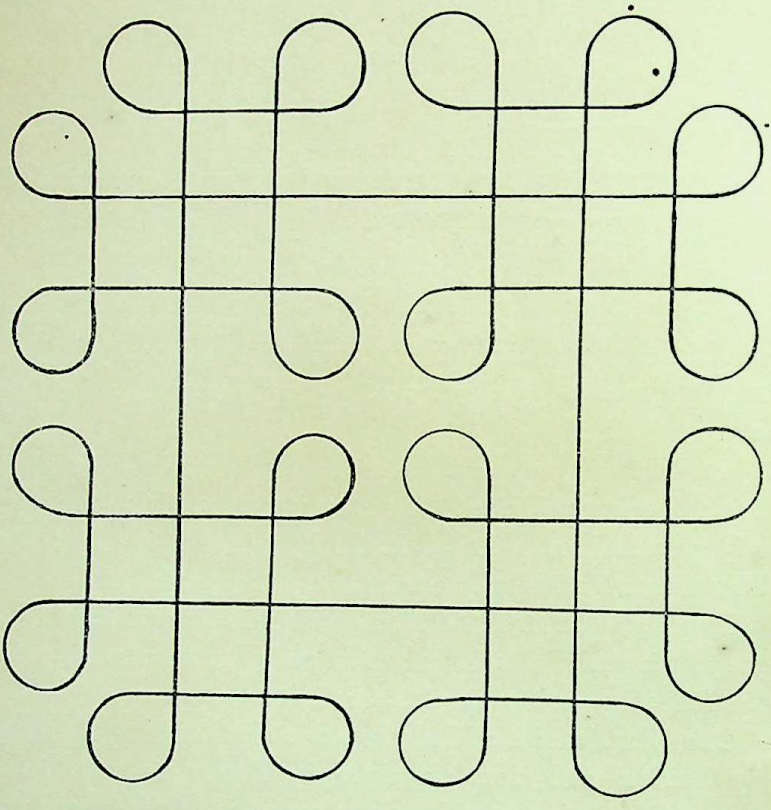
During the *Diváli* holidays the Padmásana and other sacred objects are drawn in front of most Hindu houses. On the first day of the Hindu new year, i.e. *Bali Pratipada*, the image of Bali Rája is placed on a Padmásana and there worshipped. In the month of *Ashádh* (June-July), on the *Diváli Amavásya* or lamps' no-moon day, Hindu women draw



THE PADMASANA.

on walls, in sandalwood paste, eight, sixteen, or sixty-four figures of the *Mátrikás* or mothers. On this occasion a large Padmásana is drawn, and in it the figures of the mother-goddesses, who are then worshipped. It will thus be seen that Hindu women hold the figure Padmásana sacred, and value it highly. It is said to be the seal of Padma (Laxmi), the goddess of good fortune.

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The following Sanskrit verse refers to the origin and use of the Padmásana :—

Padmásana Mahad-divyam Padmáya Asanam Smritam,
Padma-Nábha-Prasádát cha Padmaya Prakati Kritam.
Yashoda-Máhave Proktam, Grihadváre Vibhutidam,
Devánám Mánavánám cha Mangalam Shubha Karmasu.

This may be translated as follows : "The Padmásana is the great celestial Asana (seat) of Padma, the goddess of good luck and the consort of Vishnu. By the favour of the god Padmanabha (Vishnu) the guardian deity of the Hindus, the goddess Padma made its sanctity and importance known to the people."

Rao Bahadur P. B. Joshi adds that warriors using the Padmásana as their seat on horseback, or on an elephant, or in a chariot obtain victory, and that, if drawn on the front of a house, the figure brings luck to the inmates. He also describes the traditional origin of the belief in the Padmásana's influence, i.e. that in a fight between gods and demons Vishnu blessed it, at his consort Laxmi's request, and declared that it should in future be more luck-giving and sacred than his own vehicle.

The interesting questions suggested by the discovery of so common an Indian symbol on an ancient Sumerian seal are : Did the symbol come originally from Lagash to India, and, if so, when ?

It seems unlikely that an intricate design such as this undoubtedly is could have been invented both in India and Mesopotamia. More probably it was brought from Mesopotamia at a very early date. According to the late Mr. A. M. T. Jackson, trade with Mesopotamia by the Persian Gulf sprang up not later than 750 B.C., and by this route Indian traders brought home the Brahmi alphabet, the art of brick-making, and possibly the knowledge of the lunar mansions (*nakshatras*), the Babylonian weights (*Manā*), and the legend of the Flood (*vide Imp. Gaz. of India, Bombay Presidency*, vol. i, p. 15).

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Although it cannot be concluded on the evidence available that the Padmásana came to India by the coasting route down the Persian Gulf as early as 2850 B.C., interesting speculation arises from the fact that a symbol commonly used both as the seat of an Aryan goddess and also of the primitive, i.e. pre-Aryan, mother-goddesses was used also in Lagash in the period referred to

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The Decipherment of the Hittite Hieroglyphic Texts

By the Rev. Professor A. H. Sayce

THERE are the same recognized rules for the decipherment of an unknown script as there are for that of an ordinary cipher, and if they can be followed the script can be deciphered with as much ease as the cipher. Sometimes they cannot be followed, sufficient materials being absent; in this case, all we can do is to wait patiently until the materials are forthcoming.

At one time this was the case with the so-called Hittite hieroglyphic texts. But it has long ceased to be so. The materials for a scientific decipherment of them have been gradually accumulating, and verification has gone hand in hand with the determination of the value and meaning of the characters. We are no longer dependent upon a few fragmentary inscriptions, too often in so imperfect a condition as to make the forms of the characters upon them more or less uncertain.

It is now nineteen years ago since I laid my first results before the Society of Biblical Archæology (*Proceedings*, 1903). From that time forward I have contributed to the *Proceedings* of the Society a series of papers on the same subject, correcting, improving, and adding to my first results, as fresh texts were discovered and misreadings amended. But it was, I know, difficult for other scholars to follow what was little more than a record of the private work of the laboratory in which the main facts were necessarily obscured by a mass of details. And the restrictions upon the use of the Hittite type increased the difficulty.

With the publication by Messrs. Hogarth, Woolley, and Lawrence of the inscriptions discovered at Carchemish, the chief hindrances to successful progress in decipherment have

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been removed. At last we have a number of inscriptions of the same locality and age which are complete, and in which, above all, the forms of the characters admit of no doubt. The volume containing them was published just before the war, and I had time only to make a preliminary examination of its contents and contribute a short paper on some of the results to the *PSBA.*, 1915. Owing to absence from England I had to put the subject aside during the war, and it is only recently that I have been able to take it up again. What I now propose to do is to sum up my previous laboratory work and add a second chapter to my first paper. For the less important details and references those who are interested in the subject must consult my earlier articles. Where no proof is given of the value or meaning assigned to a character, it is in them that the evidence will be found.

Method of Decipherment

The starting-point of decipherment has necessarily been the bilingual seal of Tarkondêmos. This, however, was not a simple matter, as the progress of my decipherment has shown that the inscription is not in two languages as we should have expected, but merely in two different scripts, the cuneiform representing the same language as the hieroglyphic, like the Cappadocian inscription of Kuaruwan, king of the Eneti, now in the Louvre. The seal, however, settled the signification of the ideographs for "king", "country", and "city", as well as the phonetic values of the character *me* and the ideographs *tarku* and *dime* or *time*. The rock-reliefs of Yasili Kaia had already given me the ideograph for "deity", and the proper names preserved in the Egyptian and cuneiform inscriptions made it clear that the nominative of the noun ended in *-s*, which consequently was the value of the sign (*TSBA.*, 1881). Subsequently I pointed out in the *Academy* that the Bowl inscription in the British Museum showed that must represent the accusative suffix which the analogy of the surrounding languages would suggest had the value of

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-n, while Dr. Peiser discovered that was used to divide words, though it was employed very irregularly. Then came the brilliant suggestion of M. Six that a certain group of characters occurring in the Carchemish inscriptions, where it is accompanied by the determinative of "country" or "city", the third character being *me*, must represent the name of Carchemish—a suggestion which has been abundantly verified by subsequent discovery. As in some cases the character following *me* is , which at Mer'ash takes the place of in the nominative of a noun, I adopted the suggestion of M. Six and made it the basis of my future work.

It soon became evident that and must be vowels, as they could be inserted or omitted freely in the same words. Since the second once follows *me* in the name of *Carchemish*, it was clear that it had the value of *i* or *e*, while other indications made it clear that the first character was *a*.

Then came the discovery of the name of Tyana in the Bor (Tyana) inscription, in which the values of *n* and *a* were already known. Since and frequently interchange with , which I subsequently found to represent the word *uana, uan, in*, as well as the simple letter *n*, it was plain that the title of king of *Tyana*, to which the determinative of "capital-city" was attached, and the last five letters of which could now be read, must be *Tu(a)-a-n-a-n-s*. This gave the value of the first character, which depicts the body of a chariot.

Meanwhile, the interchange of *me* with the pot ( ), and in certain cases with the foot, furnished a clue to the values of these characters, as well as of the character which denotes a city and its correlative (*mia, mi*, "a place"). I was now in a position to read the several forms of the name of Hamath, Assyrian and Egyptian *Amatu, Amitu*, occurring in the texts from Hamath, and thus fix the values of some more characters. I was also able to detect the name of

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Mer'ash (Ass. Markhaśi) in the inscriptions from that district, though unfortunately I went wrong in what I believed to be one form of it, and imagined what is really a patronymic in *-si* to be a variant of the name.

The variant forms of the name of Carchemish, to which the publication of the recently discovered texts has contributed, together with the interchange of characters in words and grammatical forms, more especially the nom. sing., largely increased my syllabary. At the same time ideographs and determinatives were co-ordinated and explained, and the objects represented by the characters more or less determined.

There was one name, however, of frequent occurrence which I could read only conjecturally. This was the name of the chief deity of Carchemish, after whom also the people of the district were named. The name consisted of two characters, the second of which was *mi* (or *wi*). The first character formed the first element in the name of a country with which the Carchemish rulers were in close connexion and which forms part of the titles of the kings of Tyana, the second element in this latter name being the character which I read *gha*, or, as I now know, *kuan, kan*. Other reasons which will be found in my original article combined to lead me to the conjecture that the unknown character had the value of *khal*, the country over which the kings of Tyana ruled being that of the *Khalkuan* or "Cilicians", while the name of the deity was Khalmi-s, which reappears in that of Aleppo, the Assyrian Khalma-n, the derivative Khalmi-mi-s, or, rather, *Khalbi-bis*, "he of Khalmis" or "Khalbis",[1]

[1] Khalbis, I believe, was the older form of Khêbê, Khubis, "the queen of heaven" and goddess of Aleppo, whose name occurs so frequently at Boghaz Keui. Khubis-na, "the land of Khubis," the Greek Kybis-tra, took its name from her. She must be the original of the Lydo-Phrygian Kybelê, one of whose names, according to Hesychius, was Κόμβη, while another was Κυβήβη, corresponding with the Khalbaba of Ordek-burnu. Κύβεβις signified one of the eunuch-priests of the goddess, the Κυβηκοὶ being "Korybantes", whence came Κυβήκη as a title of the deity. Κύβεβις is the Kombabos of Lucian's "De Dea Syria", who was the eunuch-priest and chief architect of the goddess of Hierapolis or Membij, the later Carchemish. In the epic of Gilgames Kombabos appears as Khumbaba.

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being probably represented by the Akhlamê of the Assyrian inscriptions who are placed by Tiglath-pileser I in the neighbourhood of Carchemish. Subsequently I found that Holwân is still the name of the village immediately to the west of Jerablus, and that in the Ordek-burnu inscription *Khal-bi-bi* is written חלבבה.[1] The legendary Babylonian king Lugal-marda is said to have conquered Khalma in Northern Syria (Poebel, *Historical Texts*, p. 117).

If the values I assigned to the characters were correct, further study and the addition of fresh materials would verify them. And this in the majority of instances has been the case. Characters to which I had been led independently to give the same phonetic values have time after time been found to interchange with one another as new materials came to hand, e.g. *ku*-TE-*an-na* (M. ii, 7) and *ku*-TE-*ná* (M. xxxii, 5, corrected from the squeeze), *Nâ-gu(s)-is-is* (M. xvi, A) and *Na-a-gu(s)*-KUAN-*wi-si* (C. A 11, *a* 1), *Na-a-gu*-KUAN-*wi-si* (C. A 11, *b* 1).[2] The correct local names, moreover, have resulted from my decipherment, the names belonging to the localities in which

[1] The name of the goddess is Khalmassuttum in the Boghaz Keui tablets, in which she is identified with Ilbaba (K.A.B. iv, No. 9, *Obv.* 17). In a Liverpool tablet (*Annals of Archæology*, iii, 3, pl. xxviii, 7, 3) the name is spelt Khal-ma-su-tum. The form has been Semitized from Khalmas. The name of the goddess is ideographically written DUKH-SUM-SAR, "fertility—destroyed—renew," an appropriate title for the Earth-goddess. For the reading Ilbaba instead of ZA-MA-MA see Langdon, *JRAS.*, October, 1920, p. 515. Ilba-ba = Khalma-s, Khal-was. In some passages of the hieroglyphic texts we have to read Khubis instead of Khalmis. Thus an unpublished inscription seems to make it clear that in C. A 11, *a* 4, 6, the reading is KU-*khu* (rather than *khal*)-*mis-k-is*, i.e. *khumis-kus*, "chief mason" or "architect". (It may be noted that Khalmi or Khalbi would appear as Akhlam in Assyrian, and that just as Tiglath-pileser I states that the army of Carchemish consisted of "Hittites and Kaskians", so Shalmaneser I states (*Keilschrifttexte aus Assur*, 16, p. 20) that the army of Khali-galbat consisted of "Hittites and Akhlamê".)

[2] We know from the way in which the name of Mer'ash is written in M. xxi, 2, that KUAN-*gu(s)-is* and KUAN-*isi* are intended to represent the Assyrian *khas*, *qas*; hence the name in the text must have been pronounced *Nâkhas*, or, rather, *Nâghuwis*. This must be the Nukhassi of the cuneiform texts, Anuqas probably in Egyptian, which lay between Melitene and Carchemish. The form of the word in cuneiform makes it probable that the first syllable should be transcribed *nua* rather than *ná*.

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the inscriptions have been found being met with in them. Thus we have Carchemish at Carchemish, Hamath at Hamath, Unqi at Kirsh-oghlu. Unqi was the capital of the kingdom of the Khattinâ according to the Assyrian texts, and in the Kirsh-oghlu inscription we have not only *Un-qi*, but also *Khat-ti-na*.[1] It is the same with the personal names; the king of the Emir Ghazi inscriptions, for example, is Mamias, a typical name of the district which appears in the Greek inscriptions as *Μαμόας* and *Μάμεις*. So, too, we have names which correspond with those found in the cuneiform texts, like Us-Khatti, Tuates, or Masnuan, Khalmuan from Masnis, the Sun-god, and Khalmis, exhibiting the same formation as *Τάρχων*, *Τάρκων*, or the cuneiform Kuaruwan from the god Kueras (in the Cappadocian inscription, now in the Louvre: *Kuaruwan* SARRU *Wantuwas* "Kuaruwan king of the Eneti").

Equally cogent is the fact that the grammatical forms yielded by my decipherment are always consistent and agree with those of the other Asianic languages which have been revealed by the cuneiform texts. The nom. sing. in *-s*, the acc. in *-n*, the plur. in *-s*, the poss. pron. *mis*, the part. in *-s*, the 1st pers. of the aorist in *-mi* and *wi*(*-bi*), and the 3rd pers. in *-ti*, *-tu*, are all common to the neighbouring languages of Asia Minor. The sense, furthermore, of the inscriptions is that which we should expect. Take, for instance, the inscription discovered in 1906 on the base of a column at Nigda, which reads according to my system of decipherment: *yi-is-a agu-un es-tu a-na-ś i-us-i-ti amiskus*,

[1] It was the hieroglyphic spelling in the Kirsh-oghlu inscription which originally led me to correct the false reading "Patinâ" for "Khattinâ" in the Assyrian texts, which up to that time had misled the Assyriologists. A re-examination of Mr. Anderson's squeeze of the Kara-burna inscription (M. xlvi) has cleared up completely the reading of the last line. It is D.P. *mi*-MI-*mi-a* NUWI *Tua-uan-a-na-i-yi* UANA MISNA-*si*-[*i*] *Khat-tu-na-is-mi atti-ś* KAN(?)-*wi a-na Mis-na-i* | MISNA *kuan-a*-KUANA-*na*, "for the people of the Tyanian king, son of the Sun-god of the land of the Hittites; I the prince have erected to the lord Sun-god his (or this) sanctuary."

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"This stone the king has erected in the temple (being) chief swordsman" (M. liii); or the inscription on the base of the great statue of the god Agusimis at Carchemish, which begins: *yi-[a] uana-mi-a*[1] *A-gu-(gu)s-mi uan-na-wi yimes Masni-s ku-wi*, "This divine place of Agusimis the god I the Sun-god have made" (C. A 4, *d*). It will be noticed that the word "god" follows the name of the deity as it does in the Ordek-burnu inscription, and that here, as elsewhere, the king is called "the Sun-god", as he is in the Hittite inscriptions of Boghaz Keui, the title being sometimes "my Sun-god" (*Masnis-mes*, C. A6, 1, 3), as also at Boghaz Keui.

The inscription of Ordek-burnu is a striking confirmation of my decipherment. Though written in the letters of the Aramaic alphabet, the language is not Semitic with the exception of the word "god" and the names of the deities Shemesh and Rekeb-el. Unfortunately, the greater part of the inscription is destroyed; of what remains, however, the line describing the erection of the monument is preserved in full. This reads:—

יזיהני אשם כין מתהא נב שמש אלה

This (with the exception of the last two words) is an exact transcription of my reading of similar hieroglyphic texts, which would be: *yiśi-ani(n) es-mi kuin(is) my-tua nawi(s) Masni(s) uana(s)*, "This stone I have erected, (being) high-priest of this country (and) king, the Sun-god." Even the order of words is the same as my decipherment makes it in the hieroglyphic texts. As I have observed above, the name of the country, to which the erector of the monument belonged, is written חלבבה, which occupies the same place as *Khalmimi(s)*, or rather *Khalwiwi(s)*,[2] does in the texts of

[1] The phonetic value of the ideograph for "god", which is usually followed by the complement *na* and *ni*, is settled by the Emir Ghazi inscriptions B 4 and C 2, where in the duplicate passage it is replaced by the character *uan*. On a coin of Tarsus the word appears as Ana.

[2] The interchange of *m* and *w* in Assyro-Babylonian was due to Asianic influence. The pot ( ) was more usually *wi* or *bi* than *mi*; when *mi* was intended, or some other character denoting *mi* was usually attached to it.

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Carchemish. The god Rekeb-el, which also occurs in the inscription, corresponds with the *Tuana* of the hieroglyphs, *tua-uana* being "chariot-god", while נב־כון הכפהא in ll. 4, 5 is the hieroglyphic *nawi-kuani(s) akumia* (or *akuwia*), "royal high-priest of the sanctuary" (literally "hinder-place"). It may be noted that the mosque of El-Qiqân at Aleppo, into the wall of which a Hittite inscription has been built, stands on a hill which bears the non-Semitic name of Akibi.

In 1914 I pointed out that the character , the origin of which I did not recognize at the time, must, if my system of decipherment were correct, have the value of *gus*. Since then I have discovered that it represents the horn of an ox mounted on a pole. Since then, also, the cuneiform tablets of Boghaz Keui have been published, from which we learn that at the entrance to a Hittite temple or city a pole was erected with an ox-horn on the top of it, which was called GIS *gušias* (from the Sumerian GIS-GÛ(D)-ŠI "wood+ox+horn")[1]; the erection of a similar *gušias* in front of a temple is repeatedly mentioned in the hieroglyphic texts (e.g. C. A11, *c5, isy Tarku-wias-u-s Karka-mi-ś-mi-i kimmia timia gusi-a-an ku-i,* "supreme over the land of Tarkus in the country of Karkamish a gate-way (and) consecrated place (i.e. altar) of the ox-horn-pole I have built").

It is more than a coincidence that in the Bulgar-Maden inscription (M. xxxii, 4) the object following the picture of the pouring out of a libation reads *wi-ni-n*, i.e. *οἶνον*. As is well known, *οἶνον*, the Heb. *yayin*, Ass. *înu* (*winis* in Boghaz-Keui Hittite), has no Indo-European or Semitic etymology, and was a word borrowed from Asia Minor. Similarly, the "vine-tree", which was planted by a king of

[1] *Keilschrifttexte aus Boghazköi*, i, 11, *Rev.* 29–32, where "the AN-ZA-QAR and GIS-*gušias* in the city of Khatti" are mentioned. The AN-ZA-QAR ("god+stone+tie") was a pole or column of stone to which a sacred stone was attached, and the two cult-symbols are similarly associated together in the Carchemish texts (e.g. C. A6, 8; M. xi, 5). The first of them seems to have been a Sun-pillar (M. lii, 5).

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Carchemish (M. x, 2, *is-is uan* D.P. *Aram-me*, "who has raised the vine of the Grape-god"), after the fashion of the Vannic kings, was called *uan* or *wina*, its phonetic value in the name of the Eneti (M. xxxiii, 3).[1]

Equally conclusive, from a scientific point of view, is the translation (given above) which at once offers itself of the inscription on the base of a column from Nigda: *yi-is-a ani-in a-na-ś i-us-i-ti A-mi-s-ku-ś*, "This stone the king has erected, (being) chief prophet" (M. liii). The last word is written A-*mis-ku-is* in C. A 3, *a* 4, with a long tongue protruding from the mouth of the determinative A "mân". It is, therefore, interesting that in the Boghaz Keui tablets the tongue of the inspired priest is said to be "protruded" before the deliverance of an oracle.[2] I will conclude with a verification which is especially cogent. Among the earliest results of my decipherment was the fact that 𓏺𓏺𓏺, the numeral 3, had the value *kas*, and 𓏺𓏺𓏺𓏺, the numeral 4, had the value *me*. Subsequently it resulted in showing that 𓏺𓏺𓏺 is *ku* or *kê*, *is* and , the bull's head, *mi*. Now comes an inscription from Carchemish of "Imuis[3] priest of Khalmis, my Sun-god", in which the numeral 3 is glossed *kê-is* and the numeral 4 is glossed *mi* (C. A6, 6).

It is natural that I should have made many mistakes in my task of decipherment and assigned erroneous values to several characters. The nature of our materials made this inevitable. They were few in number, imperfect, mutilated, and often difficult to read. Characters in relief are especially liable to defacement. The inscriptions, moreover, belonged to different countries and ages, and might, therefore, be expected

[1] The name of the god Aramme, Aramis in the hieroglyphs, is represented by the picture of a bunch of grapes.

[2] An inscription from Assur translated by Ebeling shows that in Assyria also a similar belief prevailed. Offerings were placed before an image of "The Mouth and Tongue" of Istar, and the priest then implored it to intercede with the goddess (Ebeling, *Quellen zur Kenntnis der babylonischen Religion*, ii, pp. 2, 47).

[3] Or Yamuis. It is probably the Greek Imois.

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to exhibit variations in dialect, particularly as regards the vowels. Some of them were in a much more cursive hand than others, and my identifications of the forms were not always correct. Some, too, were carelessly written, and the example of the Egyptian monuments proves how readily hieroglyphic signs are miscopied by an ignorant engraver. An illustration of this is to be found in the very badly written inscription of Carchemish (C. A 2, 3), where the *ka* of "Carchemish" is omitted in one instance and the name of the king is written with the character *tua* instead of the somewhat similar *nâ*, which we find in more carefully engraved texts. If all the texts were as well engraved as C. A 6, a large part of the decipherer's difficulties would be removed.

With the increase of better preserved inscriptions from the same locality, Carchemish, some of them still unpublished, I have been able to correct former errors and make new discoveries of importance. First of all, the name of the national god of the Kaskian Hittites (as I will henceforth call them) was not Sandes, but Tarkus. The symbol of the deity, , like the Assyrian and , represented Tarkus, Sandes, Hadad, Rimmon, Tessub, etc., according to the district in which it was employed, and so probably did the compound ideograph *Tar(ku)-ku*, originally intended to indicate the pronunciation *Tarku(s)*, but in later days regarded as a single whole, like similar compound ideographs in Assyrian. Hence the Kaskians or their princes called themselves, not "Sandians", but "Tarkuians", and the initial title of the Mer'ash kings must be read *Tarku-di-mi-ti-mî-i-is-s*, "he of the land of Tarkondemos." The suffix *-ti* denotes "belonging to", as in *Tua-tes*, "a charioteer," *Ni-mi-tis*, *Mi-ni-tis*, and *Mi-nissi-tis*, "belonging to the River-land."

"The River-land," the Naharaim of the Semites, is another discovery. The word *ni* denoted "water" in Kaskian; hence the value *ni* attached to its picture . *Nis* was

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"river", usually distinguished in writing from *ni* by a slight change in the form of the character , giving it the appearance of a stream rather than of flowing water. Consequently in M. iv, A, B, the reading is *mi-nis-ti-nas* and *mi-nis-nas* rather than *mi-ni*, "of the land of the rivers." One of the royal titles is that of "lord of the nine rivers", e.g. M. x, 4, 6, *nis*-IX-*ana* (followed in line 6 by *Khal-kuan-a Mi-ta-a-kan-is*, "of Cilicia, belonging to the land of Mita," or Midas).[1] In M. xxi, 4, the place of the numeral is taken by the word *kuan-mi*-[*a*] and *kuan-mis* (preceded by *NI-S*), which is probably to be read *khaṃmia*, the word for "river" in the first example being replaced by the ideograph of the River-goddess, which, as we have long known from M. vi, 2, is to be read *Na-na* or Nina, the Nana of the Greeks who described her as the daughter of the Sangarios. In M. xxi, 4, the ideograph is glossed by the picture of a reservoir ◇ with the phonetic complement *-nas*, and in C. A4, 3, the latter is used to represent the syllable *nis* in the word *Tua-uan-ni-*◇*-s-mia*, "the city of Tyana." On the other hand, in the sense of "water-basin" ◇ is represented by ◇*-a-is-mi-i-yas* in M. i, 3, and simply *a-is-my-a-is* in M. xxxiv, C. In C. A 11, *c* 3, reference is made to "the River Khulanis" (*Ni-is Khul-a-n-i-is*), the Khulana of the Boghaz Keui texts, which Dr. Forrer identifies with the classical Iris, the whole passage being: D.P. *Tarku-s* D.P. *Kar-ka-mi-ś* D.P. *Khal-khalmi-mi-mi-ś-mia atus amy kuan-ana-a-na-ś-mia* D.P. *Tarku-s* NI-*is-Khul-a-n-i-is-mia Ni-my-mia Mi-ta-si un-ni-us*, "Tarkus-Carchemish of Khalbibi, the lord of the city of

[1] Besides "the 9 rivers" we find also "the 9 states" and "kings" (M. xviii, B5, etc.), "the 9 sanctuaries" and "the 9 gods" (M. x, 3, 4). There were also the 9 sacred horses (*yuami*, M. xlviii, 2). In a Cappadocian tablet (*Cuneiform Texts from Cappadocian Tablets in the British Museum*, 113644, 4) mention is made of Khana-Narim, "Khana of the River" or "Rivers". If it is "Rivers" it will be the name of a country, thus distinguished from Khani-galbat or Melitene; otherwise it would be the name of a city. Besides *nis* "water" *tutis* also meant "river".

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Hierapolis, Tarkus the god of the sons of Mita of the River-land of the River Khulanis." [1]

Nina or Nana, "the River-born" goddess, was naturally the goddess of the great river-fortress Carchemish.[2] Hence, in the Carchemish inscriptions, the people of that city are repeatedly called *Ninatis*, *Nanatis*, "Niretians." This explains the name given by Ammianus Marcellinus to Carchemish, Ninus Vetus, "the old Ninus," which has been the subject of so much controversy. The name of Nina, Nana, as I pointed out in the *PSBA.*, January, 1915, p. 10, interchanges with the head of a horse, to which the phonetic complement *ana* (the three drops of lead or silver) is sometimes attached (e.g. C. A11, *b* 6). We are reminded of the kelpie or river-horse of the Highlands, as well as the hippocampus of the Greeks. In the Hamath inscription M. vi, 2, the "swordsmen of the people of Nana" (D.P. *Na*-NANA-*na-yis-mia*) mean the swordsmen of Carchemish. As we learn from the Carchemish texts, the consecrated "swordsmen" or "dirk-bearers" of Attys distinguished the religious cult of Carchemish, whose king accordingly bore the special title of "the Swordsman of Carchemish", just as the ruler of Melia (Malatiyeh) bore the distinguishing title of Akuanas or Akuana-nas, "Arch-priest" (in which I see the Phrygian title *akena-no-lavos*). Thus, at Gurun (Olmstead, *Travels and Studies*, xvi), ...*nais*, "the processionist of Khattu, Ma and the Sun-god, the priest of Khattu and supreme king," calls himself "Arch-priest of Melid, Swordsman of Carchemish, Arch-priestly [ruler] of the River-land (?), king of Oinoanda". At Emir-Ghazi (M. 1, 1, 5) Mamoas is entitled "the Swordsman of the goddess Amma", or "Ma", in whose image on Mount Sipylos the Greeks saw that of the weeping Niobê.

But to return to *nis*, "a river." We find it again among the

[1] Cf. M. i, 3, D.P. *a-(i)s-mi-i-us khul-i-nas*, "basins of green," i.e. "spring water?" In the Boghaz Keui tablets the Khulana is interpreted the "Green" river.

[2] *Nana*-AMEL-*is*, "The Man of Nana," is the name of a son of the king of Carchemish in a Boghaz Keui text (K.A.B. iv, No. 4, *Obv.* 52, 58).

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titles of King Imois (C. A6, 2), where it is written ◇(*Nis*)-MY-*me-yu* D.A., i.e. *Nis-me-yu* "of the River-land". The name forms part of a sentence which, so far as I am able to read it, runs: *amis-wî kuan-wi* D.P. *Tarkuwis* D.P. *Aramâwis-mia* MASNI (?)-*mi-wi agussi*-TE-*amias-mia akuan-wi miâs agu-wi uannais isi-mian agussí*-TE-*ana agu-i isan Nis-me-yu*-D.A. . . . -*me-mis wismiy* . . . -*ni*-D.A. . . . -*me-mis wisi-mia* MIA *Mi--ś-yi*-D.A. *Mi-is-ka-yi*-D.A. *Kusy-mi-yi*-D.A. . . . -*me-wis amias*[1] *Masni-me nawi*; "I am swordsman, I am priest, a Tarkuian of Aram; in the land of the Sun-god (?) in the Northern domain (?) I have been consecrated ruler; places I have built for the gods in the highlands of the North (?) I have built a temple for the gods; I am supreme over the River-land, being supreme over the land of . . . ni in this place, supreme over this city, over the Misians, the Moschians and the Kusians, (even) the cities of my Sun-god, the king."

The Kusians, also written Kasians, occupied Northern Syria, extending westwards from Carchemish to the Gulf of Antioch, according to the Assyrian inscriptions. A letter from Nabu-sum-iddin, published by Dr. Pinches in the *PSBA.*, November, 1881, includes Karnê (the Atu Keren of the Egyptian lists), Dâna (now Dânâ), Kullania (Calneh), Arpad and Iśana (now Isân) among their cities, and states that the horses exported by them bore the name of Kusâ or Kusian. "The country of Kassi" or "Kasse" or "Kaśi", which has been erroneously identified with the *people* of the Kassi in Babylonia, is mentioned several times in the Tel el-Amarna tablets (Knudtzon, 76. 15, 104. 20, 116. 71) as an ally of Mitanni and the Hittites, whose territories it adjoined, and has left its name in the classical Mons Casius. At Emir-Ghazi Mamoas takes the title of "king of the land of Kusi" (*Ku-si-mi-a*), in accordance with the fact that the Kases (Byzantine Kasin) occupied the plain stretching east-

[1] The head of the ass which was usually *mias* had also the value of *anas*, *nas* (cf. Greek ὄνος); hence it could be used for *anas* "king".

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ward from Emir Ghazi to Venata and Tyana, while another body of "Kassai" were on the frontier between Pamphylia and Isauria. In the first line of the larger Hamath inscription (M. vi, 1) the original in the Constantinople Museum reads clearly: "I am Ari(s)'atumian, chief swordsman, arch-priest of Yakhan, king of Hamath (and) the land of Kus" (*amistus akuannâwis*[1] *Ya-kuan-nâ-a-na*-D.A. *nawis amia Ami-it-ti-mi-*[*a*]*-s Ku-is-mia-* D.A.). It is also a common title of the Carchemish kings, e.g. C. A6, 3, *Khal-kuan-an k*(*a*)*-kuan-n-i-s A-m-e-i*-ME *Kus-un-na akuan-ni ku-i-is at-*(*ai*)*ta-mia*, "priest of the Cilicians, who has built a palace (*attamia*) for myself, the Kusian arch-priest"; C. A11, *b*3, *gus-mia Agu-gus-is-si-mi mi-*(*mi*)*-a-me-i-s Kus-un-ni-i-s . . . mes-wi*, "the ox-horn symbol of Agusimis I the Kusian citizen . . . have erected"; M. xi, 3, *na-wis Tuan-a-wis-mia Kus-wis*, "the king, a Kusian of Tyana."[2]

The Misians, who are conjoined with the Kusians and Moschians, are the Masu of the Egyptian monuments, the Misi of the Tel el-Amarna tablets (Knudtzon, 101. 4, 105. 27, 108. 38, etc.).[3]

One of the most important discoveries the Carchemish

[1] Perhaps we should read *akuana-nawis*, since the word is sometimes written with a second *na* or *nau* (e.g. M. xxxiii, 2). In the Asianic languages *l* and *n* so frequently take the place one of the other that I am inclined to see in *akuana-nawis* the Old Phrygian *akenano-lawos*, "High Priest." The initial *a* is the Kaskian word *a*, "man" (literally "the speaker"); the ideograph *akuana* is a compound of the arm (*ku*), the numeral "one" (*ua*) and *na*. Just as *ak*(*u*)*ana-nawis*, also written *ak*(*u*)*anana-nawis*, is the Phrygian *akenano-lawos*, so the Hittite *kuana-mia*, "consecrated place" or "temple", would be the Phrygian *kene-man*, "consecrated place" or "tomb".

[2] In a mutilated passage, *Keilschrifttexte aus Boghazköi*, iv, 17, 17 seq., we read: ". . . whatsoever matter below, at home, abroad (*mamian kuinki sapal biran khatrâ*) . . . any Hittite or Arzawan (*Arzauwa*) . . . now do thou these Kuśan people (*kuies kûs* D.P. *Kuśawanas*)."

[3] In *Keilschrifttexte aus Boghazköi*, iv, 39, 56, the city of Mâsa is mentioned; it was in the neighbourhood of Winawanda (Oinoandos), also written Winianda (Oiniandos), the later Epiphaneia, and Ussa or Issos (probably the Washash of the Egyptian texts).

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inscriptions have enabled me to make is the reading of the name of the Sun-god. This is *Mias-nis*, written also Masnis, Masnas, and Misnis, Misnas. The phonetic spelling interchanges with the ideograph of the sun, to which is often attached the phonetic complements *-s-n* and *-n*. As in the cuneiform inscriptions of Boghaz Keui, the king is called "the Sun-god", and (as I have remarked above) as at Boghaz Keui he also gives himself the curious title of "my Sun-god" (e.g. C. A6, 1; in M. ii, 6, MASN-*ś-ni mī-i* is "in the land of the Sun-god"). That the title was borne by other kings in the Hittite region besides those of the Hittite empire we learn from the impression of a seal on a tablet found at Boghaz Keui and published by Professor E. Meyer, "Reich und Kultur der Chetiter," p. 44. It contains two lines of cuneiform, which read: (1) *dup-sa-ar-*[*r*]*i-i-as-ma-as Khu-uz-zi-ya-us* (2) *Sam-si-us Us-ta* (?)- . . . *-ku-wa-as*," This is the seal of Khuzziyaus, (2) the Sun-god of Usta . . kus" (which incidentally informs us that the name of the Sun-god in the Boghaz Keui texts is the borrowed Assyrian Samsi-us).

Masnis or Masnas is evidently the Lydian Masnês, Masanês, found on two coins of Sardes (Head, *Catalogue of Coins in the British Museum, Lydia*, pp. cxi seq.). One, of the time of Alexander Severus, represents two figures with clubs, one of whom holds out a herb, and with the names Masnês and Tylos attached to them. The second, of the time of Gordian III, represents a warrior striking a huge serpent with a club, and has the name of Masanês written over him. The reference is clearly to the Lydian myth quoted by Pliny (N.H. xxv, 14) and Nonnus (*Dion.* xxv, 451–551), from Xanthus how the hero Tylos was restored to life by a herb called Balis after having been bitten by a serpent, which was subsequently killed by Da-masen, son of Gê. A similar story has turned up among the Boghaz Keui tablets; here the serpent is named Illuyankas, who was slain by the god and his son (*Keilschrifttexte aus Boghazköi*, iii, No. 7). Masnês becomes Mannês, Manês, as well as Massês, by assimilation of

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s to *n* and *n* to *s*; see Wilamowitz-Möllendorf, *Hermes* 34, p. 222. Mesna-bö and Mesna-wö are names found in the Karian inscriptions.[1]

The correct reading of the word for "priest", *kuanis*, I owe to Dr. Cowley (see his *Hittites*, p. 63). The ram's head and horn, however, are not *n*, as he suggests, but *kuan*, *kuan*, *kan*, though in combination with other characters they could be used to express simply *ku*, *ka*, and *kha*. *Kuan* is evidently the Karian κῶν (Tzetzes, *Lykophron*, 644), connected with the Greek κῶας and κώδιον. Another Kaskian word which has its analogue in the Karian glosses is *gus*, *gusi(s)*, "a stone," the Karian γίσσα (Steph. Byz., s.v. *Μονογίσσα*). The name of the city over which the Kölitolu-Yaila king claims rule (M. xxxv, 1, 3) now becomes intelligible. It is GUA-*ku*-(*ku*)*ana*, that is, Kuana or Ikonion. Kölitolu-Yaila was, in fact, in the district of Ikonion.[2]

The native spelling of the name of Ikonion, according to an inscription discovered there by Sir W. M. Ramsay, was *Καοανια*. This corresponds very closely with the Kaskian *kuan(is)*, which is the same word as κανειν "priest" in the Greek Lydian inscriptions and *gaenas* "priest" in Boghaz Keui Hittite.[3] The Hebrew *kohen*, which has no Semitic root (the Arabic *kahin* being borrowed from it), is a loan-word from "the sons of Heth", and we find the same word in the *ΚΟΑΑΛΑΕΙΝ* of the MSS. of Hesychius, which must be read κοαειν, and is said to be the Lydian word for "king". The initial vowel of Ikonion represents the Kaskian prefix *ă*, *i*, usually expressed by a man's head, from which we may infer that it was supposed to be derived from *ă*, "a man." Its

[1] The first of the three Lydian tribes whose names are recorded was entitled Μασδυίς, which I should correct to Μασννίς, "that of the Sun-god." It would have been the royal clan.

[2] The photograph reads: ID.-*a*(?)-*mî yis-mi-a atus* ( ) A-*atus*-A-*atus* GUA-*ku*-(*ku*)*ana*-D.A., "ruler of this country, prince of the princes of Kuana."

[3] Cf. Vannic *at-ʒanas*, "priest," *at-ʒana-we*, "consecrated," *at-qana-duni*, "he consecrated."

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presence in the Greek form of the name of the city was probably due to the fact that the *k* was really a *q* followed by a semi-labial. At any rate, it gave rise to the story that the city was named from an image (*εἰκών*) of Perseus which stood at its entrance.[1]

Kuana signifies "the priestly" or "sacred city", just as Tuana signifies "the chariot city" from the consecrated chariot of Rekeb-el, and thus is one of the many Hierapoleis or "sacred cities" that existed in the Hittite world. Not the least proof of the scientific soundness of my decipherment is that it results in finding Carchemish called not only Niña—the Ninus of Ammianus Marcellinus—but also Kuanas-mia, "the sacred city." The name occurs repeatedly in the Carchemish inscriptions by the side of Carchemish and Nina (e.g. C. A11, *c* 3, *atus amy kuan-ana-a-na-ś-mia*, "lord of Hierapolis"; A6, 5, 6, *kui attamia k(a)-(k)uan-na-s-mi-a*, "I have built the palace of Hierapolis").[2]

In my first attempts at decipherment I identified the country over which the Hamath king claimed rule with the Yakhan of the Assyrian texts. My reading of the name, however, must be amended; it should be *Ya-quan-na-a-na*, Yaghannana, "the land of Yakhannas." The name of Yakhannas has now turned up in what is the earliest of the Carchemish inscriptions yet discovered, where it reads Ya-quana-s (C. A1, 1). Yakhannas claims to be the conqueror of various countries, and entitles himself "the protector (?)[3] of Carchemish (*Kar-ka-*

[1] Has the name of Perseus been derived from that of the Cilician city of Pursakhanda or Parsakhanda, which figures prominently in the legend of the invasion of Asia Minor by Sargon of Akkad, and appears again in the Boghaz Keui tablets? Perseus, the founder of Tarsus, is merely a Hellenization of the name of Tarsus.

[2] In the Aleppo inscription (M. iii, 3) Aleppo is called *Ku*-GUANA-*mi*-MIA (Kuana-mia), "the Sanctuary-city"; the Assyrian King Shalmaneser II similarly entitles it "the city of Hadad". The inscription in question reads: "This temple-court of my (*sic*) Sun-god Attys Ka-atus (Katys) king of the land of Tarkondemos . . . has built . . . being a Yanâtian of Hierapolis."

[3] Represented by the picture of the winged genius with the head of an eagle, which was a symbol of the Assyrian god En-Urta. It was pronounced *Amuis* or Amois.

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mi(as)-a-s-mia), the Hittite (*Khat-tu-mias*), supreme over the lands, Yakhannas, of the Kaskian (*Ki-is*-KAN-*ka-a-ni-in* D.A.) Tarkuians in the city of Carchemish (*Ka'-ka*-KUAN-*mi-is*) here in the River-land (*Nă-mi-a*) the god, the Sun-god" (MISN-*i-ś-n-i-is*).

In the Aleppo inscription (M. iii, A2) the place of "the land of Yakhan" is taken by *Ya-nâ-a-tis*-D.A. "of the land of Yana." In an unpublished inscription from Carchemish this is written *Ya-ni-mi-yi* "of the country of Yani", which is termed "the land of Tarkus". Yani or Yana must be the Uan of the Egyptians, which, according to Amon-em-heb, the officer of Thothmes III, lay to the west of Aleppo, and since the name of the vine is written *wi-na* in M. xxxiii, 3, it will have signified "Vine-land". A town of Oiniandos (Winianda in the Boghaz Keui tablets) was situated one day's journey from Mount Amanus according to Cicero (*Ad Fam.* xv, 4), where its later name of Epiphaneia is applied to it. In an Assyrian geographical list (W.A.I. ii, 53–8) the country of Ya-e-na is given as adjoining Khilakku or Cilicia in the direction of Malatiyeh.[1] Here we have the explanation of the statement by Stephanus Byzantinus that Iônê was the original name of the Syrian Antioch, and the further statement of the *Periplus Maritima* that Ionia was the district at the mouth of the Pyramus. The name is written Uan-na-s in M. vii, 1, 1.[2]

The fertile plain running westwards from Carchemish to Antioch is still known as "the Lowland of Umq", the "Amyces campus" of classical geography, which, as was first noted by Conder, is called Amiqu in the geographical list of Thothmes III (No. 308). Umq is the Unqi of the Assyrian texts, the Unqi (*Uan-ku*-KU(*an*)-*i*, *Uan*-UAN-*kuan-is*, *Uan*-UAN-*kuan-ni-is*) of M. vii, 1, 1, and vi, 4, 5.

[1] Yaena stands in the same relation to Uana that the Hittite *gaenas*, "priest," stands to *kuanis*. The passage of *u* (*w*) into *i* (*y*) was a distinguishing feature of the Hittite languages.

[2] The first syllable is represented by the ideograph of "god", which interchanges as a phonetic with *uan* (*wan*, *yin*).

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But the Semitic Emeq is also used in the Carchemish inscriptions to denote the "Valley" or "Lowlands" in contradistinction to the "Highlands"; thus we have (C. A2, 6) *Ami-ku*-KUAN-*ti-mî-i mi-ana* "city-lord of the Low-lands", and in an unpublished inscription D.P.-*isi-is-ian*-D.A. *Ami-kuan-tu-is-ian-mî-i*, "in the land of the Highlanders and Lowlanders." Here the word *amikantis* (or *amikandus*) will be a derivative from the borrowed Semitic *emeq*. It is evidently "the land" or "lands of Amki" of the Tel el-Amarna tablets.

Mitanni is written *Mi-it-ta-an-a-(an)* in M. xi, 2, and *Mi-ta-a-na-s*-D.A. in C. A4, 1, 2. Mitanni or Mitanna signifies "the land of Mita" whom Winckler has identified with the Greek Midas. The Carchemish princes boast of their descent from him; thus in unpublished inscriptions we find *Mi-ta-kan-is* "of the race of Mita", and in M. x, 7, *Mi-ta-a-kan-is*, while in C. A3, 3, the god Tarkus is called A-*amis-ku-is-na-a-s-mia Khal-kuan-(ua)n-s-mî-i Mi-tua-s-mî-i*, "of the Chief prophet's land, in the country of the Cilicians and of Midas." Mita, it may be observed, is associated throughout with Cilicia and not with Mitanni, and accordingly in M. xxxiii, C. 8, we read "king ruler of [the land of] Mita (*Mi*-MI-*i-tua*-[*na*]), the supreme" (*isi-mi-s*). In M. xlviii, 1, however, which is an inscription of . . . -khattis from Hissarjik, *not* Erzerûm, *mi(a)-tua* is "chariot-place" and not a proper name (*mi(a)-tua ni-i-ni tua-a-uan si-nas-mi-an nismi-wi-ś gua-uan-na* (?)-*ś*," to the chariot-place I have given a chariot of bronze (and) water-basins of stone"). The city of Mîta is mentioned in one of the Boghaz Keui tablets (K.A.B.-ii, 31, 22).

Among the countries conquered by King Yakhanas was that of the Kanisians (*Ki-a-ni-is-mi-ian-mi-a*-D.A.; C. A1, *a*2).[1] This must be the Kanes of the Boghaz Keui texts which, according to Dr. Forrer, was the primitive capital of the

[1] The photograph shows that the other place conquered by the king was MIA-*mi-a Yi-uan-na-uan*, "The city of the Yuanians." Are the Ionians meant?

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Hittites. It is the Ganis of the Cappadocian tablets, now represented by Kara Eyuk or Kul-tepé, 18 kilometres north-east of Kaisariyeh. The name also occurs in one of the Hamath inscriptions (M. iv, A2), which reads: (1) *a-me-i isy* TI-*me-s Ari(s)-'atu-mi-ian-s akuan-na-wi-s Ya-khan-nâ-a-na*-D.A. *nawis* (2) *amia-a A-mi-it-ti-mia wi-mi* MI-*my n-nas-wi ur*[1] *Ka-a-n-nas-mia-a*-D.A. *Ni-mi-ti-nas* (3) *ku-wi i-us-i-ti mi-a*-MIANA *N-ami-kani-s*-D.A., (1) "I am the supreme consecrator (or consecrated one), Ar(is)'atumian, the high priest, king of Yakhan, (2) in this city of Hamath: the country I have conquered. A writing[1] I being of the River-land of Kanis (3) have made in the temple, city-lord of the race of the River-land." In inscription M. 3, B, instead of the last sentence we have: (2) *ku Mi-ta-a-na-s*-D.A. *Ni-mi-ti-i-s* (3) *ku-wi i-us-i-ti mi-a*-MIANA *Tarku-di-mi-a-na-us*-D.A., "(2) a statue I being of the River-land of Mita (*Mita-nas*) (3) have made in the temple, city-lord of the land of Tarkondemos"; while in inscription iv B the last line is: MA-*s Na-mi-a-n-nas*-D.A. *Ni-mi-nas ku-wi i-us-i-ti*, "Seats of the River-land I being of the River-land have made in the temple" (literally "high-place").

The phonetic value of the first character of the name of the king (which depicts a bedstead) is fixed by its occurrence in the name of Mer'ash (*Ma-ar-qua-si*), where it interchanges with *ir*, but the word it represents would be in the nominative *aris*, possibly a loan-word from the Assyrian *irsu*. Is the name of the king, then, identical with that of the Chushan

[1] The character is that which represents *ur* in (*A*)*mur-wis*, "Amorite." Since *ir* or *ar* (found in the names Gamir and Markhasi) is a picture of a seal with its string, and in M. xxxii, 2, 3, forms the first element in the compound *iry-ni-me* (sic)-*i-us*, i.e. "written stones" (*ni-meis*), to which the determinatives of an inscribed tablet and a stone are attached, I conclude that it means "to write". Cf. the Vannic *armanida-d*, "written tablets." The title *ir-wis* is frequently assumed by the writers of the inscriptions; e.g. in C. A5, *a*1, we have: *yi-a . . .-wy Yi-mi-ian-na-is ir-wi-ś akuan-na-a-wi-is-wi* D.P. *Aram-a-*[*mia*] *amistus a-na-is Khal-kuan-uan-mia*, "This have I set up, Yimiannas, the writer; I am arch-priest, chief swordsman of Aram, king of the Cilicians."

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Rish'athaim of Judg. iii, 8–10? The latter also was king of the River-land (Naharaim); he is called Chushan, i.e. Kusana(s), "of the land of Kusa," the very title assumed by Ar(is)-'atumian in M. vi, 1 (see above), and he conquered the country south of the Hittite region. Ar(is)'atumian omits the nominative suffix *-s* in writing his name in M. vi, 1, from which we may infer that it was not pronounced, and in the Ordek-burnu inscription neither the nominative nor the accusative terminations of the noun are written.

One of the errors which impeded my attempts to interpret the inscriptions was the supposition that in the inscription of the "Rabbit"-king of Mer'ash, what is really the name of his father represented the name of Mer'ash. I was led into the error by the patronymic suffix *śi*, which is also the final syllable of *Markha-si*, Mer'ash. When at New York I found that the inscription from Mer'ash in the Metropolitan Museum, which had been very faultily copied, begins with the name in question, without, of course, the patronymic suffix, the correct reading of the first line being: *A-me-i*-MIA ID.-*kuan-s amis-s my*-MIA + Y-*wi*, "I am . . . -kaṇs (? Yakhanas), the swordsman of the city." He was the son of Mamias "of Gurgumi, arch-priest of the race of Mer'ash" (*Gu*-GUR-*gu-mi*-MI-*s-mia akuan Ma-ar*-KUAN-*gus-ka-ni-s*), M. xxi, 2. In M. lii, 4, the name of Gurgumi is written *Gur-gû-me*.

In my paper in the *Proceedings of the Society of Biblical Archæology*, January, 1914, p. 10, I pointed out that the name of the god whose seated image, on a pedestal with the figure of an eagle-headed man between two lions, was discovered at Carchemish, reads Agusimis, or rather Agusiwis, if my system of decipherment were correct (C. A4 *d*). A few months later my reading was verified by Professor Zimmern and Dr. Scheil, who recovered the larger part of a poem composed by King Khammurabi in honour of the Syrian goddess Agusaya, the rival and antagonist of the Babylonian Istar, and describing how the antagonism was finally appeased by their fusion one into the other. Agusaya is the feminine counterpart of

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Agusiwis. The inscription on the pedestal is: *yi*[-*a*] *uan-mi-a A*-KU-*gusi-mi uan-na-yi yimes Masni-s ku-wi Nana-nay-uan . . . uan-mi*-MIA *A*-KU-*gusi-mi-s* KUAN-*a-ti mî-a-na*, "This god's place of Agusiwis the god I the Sun-god have made; of the Nanayans . . . the god's place may Agusiwis bless for the king of the land!" In C. A11, *a*5, the name is written D.P. *A*-KU-*gusi-mi* ("a shrine in this place belonging to Agusiwis here I have erected"): but in C. A11, *b*3, 5, it appears as *Agu-gu*(*s*)*-is-mi* and *Â-agu-gu-is-wis*. I believe the name originally meant "the Ancient One", but the Kaskian scribes made it a compound of *a* "man" (once also *á* "speaker") and *gusi*(*s*) "a rock", so that it would have signified "rock-man". At Boghaz Keui three of the king's sons are called "the gold-men" (K.A.B. iv, No. 10, *Rev.* 30), and Dudkhaliyas states that a "weapon of the gold-man" was set up in a certain spot on the frontiers of Tarkhun-tassa (K.A.B. iv, No. 10, *Obv.* 27).

The *s* of *Agusiwi*(*s*) is elsewhere equivalent to *z*, which became *d* in the later age of the Asianic languages. Agŭsiwis could therefore correspond with the Greek Agdi-stis, the father of Attys according to one story. Arnobius (*Adv. Gentes*, v, 5) tells us that Agdistis was born from a stone and "received his name from his mother rock". We are further told that he married Nana, the daughter of the Sangarius, King Midas subsequently devoting his daughter to Attys. Nana, as we have seen, was the goddess of Carchemish; the river Sangura ran a few miles to the south, and the daughters of the kings who traced their descent from Mita were dedicated to Attys. As for the suffix *-tis*, it is common in Kaskian (e.g. *Mi-ni-tis* and *Minis-tis* "of the River-land", *Karkamesiyis-tis* "of Carchemish") and it is also found in Vannic (e.g. *Argistis*).

In the Tell Ahmar text (*Annals of Archæology*, ii, 4, pl. xxxviii, 2) the name of the god is denoted by a serpent (*agu*, cf. ἔχις, *anguis*, Boghaz Keui *yankas*) followed by a picture of a stone, the passage reading: D.P. *Tarku-ku-s uan-i-is-s*

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nu-wi-i-ś D.P. KUANA-*Khal*-KUAṄ-*kuan*-D.A. D.P. . . .-*am-mi-ti-s* D.P. *Agu-gusi-wi-s Tu-uan-a-ni-i-s-mia*-D.A., "Tarkus the god, the king,[1] divine lord of the Cilicians, the god [Ka.?]mmitis, (and ?) Agusiwis of the land of Tyana."[2]

The goddess 'Atu, whose name is certified by its interchanging with *a-tu*(*a*) in that of the Wanatu or Eneti, was identified with Istar in Syria (in the compound עתר־עתה).[3] On the coins of Tarsus 'Atheh, 'Atu, is represented as seated on a lion and wearing a veil with her name written beside her, while Baal-Tarzi, the chief god of the city, is depicted along with her (Head, *Historia Nummorum*, p. 616). Hence it is not surprising that at Fraktin she appears as the supreme goddess in the company of Attys (M. xxx).[4] In front of her stands the priestess with the inscription *Am-mia*-MI-*mia-mi* ID., "High-priestess of Ammammis," and at the back: *Kuana-ana-uan*-D.A.-*ti* D.P. [*Tarku*-]*wi*, "(and) of Tarkus of Hierapolis." The strange character which follows *Kuana* has the value of *ana* according to an unpublished inscription of Carchemish—the only other place in which I have met with it. The Hierapolis in question was probably the neighbouring Komana rather than the more distant Kastabala-Hierapolis.

Sir W. M. Ramsay has given reasons for believing that Fraktin is the Das-Tarkon of Strabo. If so, it may be the Tarkhuntas of an unpublished Boghaz Keui tablet of which

[1] Or perhaps "king of the gods".

[2] At Kara-Dagh also the inscriptions of Khattu-kuanis record the construction of "this sanctuary of the gods Tarkus, Attys, and the Serpent" (AGU-*ku*); Ramsay and Bell, *The Thousand and One Churches*, p. 515.

[3] See my paper on "The Monuments of the Hittites" in the *Transactions of the Society of Biblical Archæology*, vii, 2, p. 12. In M. lii, 1, 2, 4, the character '*Atu* also interchanges with *a-ti* in the name of the country יאדי, written Yaeti in Assyrian (*Black Obelisk*, 90). In line 1 we have *Ya-'atu-yu-a-si-ian*-D.A., in line 2 *Ya-ti-a-si-ian*-D.A., in line 4 *Ya-ti-*[*asian*].

[4] Ἀδαγυούς was the name of "a Hermaphrodite" deity among the Phrygians, with which Thomopoulos (*Pelasgika*, p. 447) compares δαγύς, "an image of Aphroditê." Ada-gyus would be the Kaskian 'Atu-gus, "the oxhorn-pole of 'Atu," which might be described as Hermaphrodite, since the *guśiyas* or pole was properly the symbol of the bull-god Hadad-Tarkus.

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Kuruntas was king. In K.A.B. iv, No. 10, instead of Tarkhuntas we have Tessubtassa, Tessub and Tarku being merely the varying national names of the same deity. In an inscription of the Vannic king Sarduris II (Sayce, l, 30, 31), two Melidian towns are mentioned called Tâsê or Tas and (AN) Querai-tâsê, the *tasê* (or "township"?) of the god Queras.[1]

I can now explain another rock-sculpture of Asia Minor with more exactitude than was possible when I first attempted a translation of it. This is the sculpture at Ivriz (M. xxxiv). The inscription attached to the figure of the god is: (1) *yi-a* D.P. *Tarku*[2] *kui-s Ti-ya-s ku-wi* (2) *U-wi-ni-a-si-s a-tu Ky-ti-is-*(3)*s-mia Uana-tu-ti attas*, (1) "This for Tarkus making I Theias have made, (2) the son of Uwi-nias, prince of Ketis, father of the Eneti" (*Wanatundi*). That attached to the figure of the king is: (1) *yi-a ku-wis U-wi-*(2)*ni-a-s ami* (?) *ku-*(3)*-yu is-wi*, (1) "This making, of the High-priest Uwinias the image I have erected." In the mutilated inscription below all that can be read with certainty is: . . . *ku-wis ti-mi-a-an* . . *U-wi-ni-a-s-my a-is-mi-*[*yas*] . . , ". . . making the consecrated place . . the water-basin(s) of the place of Uwinias . . ." Uwi-nias signifies "dedicated to the priest", as Uanna-nias (C. A6, 9) signifies "dedicated to the god".

Sufficient has now been said to show that as fresh materials have come to light the application to them of my system of decipherment has resulted in translations which are congruous in sense and yield the geographical, personal, and divine names which we should expect. I will now conclude this series of verifications with an example of another sort.

In the *Journal* of this Society, October, 1912, p. 1036, I published the fragment of a tablet from Boghaz Keui containing an inventory of the royal treasures and finishing with

[1] Kuaruwan above (p. 538) is a derivative from Queras. Similar formations in *-uan*, *-ian* from divine names are common on the Kaskian seals.

[2] Or Sanda, since we are here in Cilician territory.

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the colophon: *dub* II-KAM *u-ul qa-ti sa* D.P. *Ar-nu-wa-an-da-*[*as*] *Khu-o-ti-wi-is u-nu-ut bit* TAK-DUB, "Second tablet, not finished; by Arnuandas the *Khutiwis*; (giving) the contents of the house of stone monuments"[1] (i.e. the royal museum). Then comes a counter-signature consisting of three hieroglyphic characters, which I rendered: "before the minister." The newly published cuneiform texts show that the translation is exact. The character I have rendered "minister" is the head of a large hound, and in accordance with this in the colophon of the legend of the slaying of the wicked serpent we read: D.P. *Kas-kha* AMEL . . . *pa-ni* D.P. UR-MAKH *rab* DUB-[SAR-]MES *is-dhur*, "Kaskha the . . . before the Big-dog, the chief scribe, has written (this)." In M. x, 4, the head of the hound is followed by the picture of the quiver (*ka*), which is probably its phonetic complement.

How the characters were pronounced in Hittite we do not know. In Kaskian *miami* was "before", in Assyrian *pani*; but in Boghaz Keui Hittite the word was probably *ziyantaz*.[2] As in the case of the cuneiform characters, the Hittite hieroglyphic characters had different pronunciations according to the languages in which they were employed. Thus, in Cilician *is* "a goat" was *tarkus*, Greek τράγος, *guanas* "temple" (the "consecrated" place) was *dimes* (*times*), Greek δόμος. In Kaskian itself an ideograph could have more than one pronunciation, though the one to be adopted is usually denoted by phonetic complements or a reproduction of the whole word; e.g. *ana* generally represented *amis* when written perpendicularly, and (*ámis* and *kuanas*) has *kuan-n-a-is* attached to it in M. xxi, 5.

The arm and hand in various positions occupied a prominent place in the Hittite script and represented a number of different words and phonetic values. I have had great difficulty in

[1] This is how we now know the lines should be read and translated.

[2] The Boghaz Keui reading of MI-*i*-*a*-MI-*i* would, therefore, have been ZI-*i*-*a*-NZI-*i*.

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distinguishing them, and in one or two instances have not yet been able to reach a certain conclusion. Many of the inscriptions are as carelessly written as similar Egyptian hieroglyphic ones, the result being that characters of similar form are confounded by the engravers, some of the texts are in an exceedingly cursive script rendering identifications with the original pictures a matter of difficulty, the inscriptions belong to different localities and periods, and a considerable number are mutilated or only semi-legible. It is but recently that the Tell Ahmar inscription (*Annals of Archæology*, ii, 4, pl. xxxviii, 1) has given me the pronunciation of the frequent title *a-gu(ku)-uan-na*, i.e. *kuanis* or *kuanas*, with the prefix *a* "man", which explains the Phrygian title *akenano-lavos*. The arm is merely a variant of the hand, which in its most cursive forms appears as and *mis* or *wis* and *nas*, *as*, and denotes the "seizer" or "conqueror" (see C. A3, 2). It is clearly related to *nas-wi*, "I conquered." A variant is , with the thumb expelling a word (*na*), which ought to have the value of *nas* or *as*, though it seems to have been employed for *mis* and *wis*. With the sword or dirk (*mis*) attached to it, the outstretched arm denotes *ana* "king" (perhaps a compound of *a* and *nas*), but when standing upright it represents "swordsman" (*a*+*mis*), as it also does when surmounted by the ideograph of "city" (e.g. M. iii, B3). The upright arm is *atta*, "father," also *atus*, "lord," which may originally have had the same signification; *Papas*, "father," we are told, was a title of Attys in Phrygian.[1] With the palm turned away from the reader it was *ku*, probably from *akuan* or *kuan*. With the nail of the thumb turned outward it was *isi*, "high," the cursive form of which I formerly mistook for a

[1] So in C. A6, 5: *ki-i-is ky-i atta-na-a Khattu*, "I have given gifts to our father Khattu." Cf. line 7: *ki-i-is ky-i* ID. IX *Mas-n-a-i*, "I have given gifts to the Sun-god of the 9 heavens."

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ladder.[1] The depressed hand, denoting consecration, had the value of *ti, di*; with the palm towards the reader it was *ki*, "to give." In the reverse position it was *akuan*. For other uses of the arm or hand the syllabary must be consulted.

Script and Phonology

The Kasko-Hittite hieroglyphs originated in the highlands of Asia Minor. All were primarily pictographs, and were accordingly used to express the words of more than one language. Hence we must expect to find them polyphonous.

In course of time a few of them came to be employed phonetically. Unfortunately the number of these was limited, and a very small number had to serve for the more common sounds of the language. As in Mitannian and Vannic cuneiform, the syllabic value of a character tended to pass into an alphabetic one.

The oblique or perpendicular stroke so frequently attached to a character had a double signification. Properly the perpendicular stroke denoted the vowel *u*, from *ua*, "one," while the oblique stroke indicated that the character to which it was attached was modified in pronunciation. But as this frequently meant the addition or insertion of *u, ü*, the two came to be confounded together in the later texts. On the seal of Tarkondemos the oblique stroke attached to *mi*, "four," is represented in the cuneiform transcript by *e*.[2]

One of the peculiarities of the script is that an object is

[1] With the forefinger crooked inward it denoted "conqueror", "possessor." The two forms are clearly distinguished in C. A6, 2. The name of the Karaburna king (M. xlvi, 1) is Sianas, and he calls himself "king of the land of Siana", *Si-ana-s-mi-a nais*. Sir W. Ramsay places Sanisênê to the north of it, and the fortress itself is either the Byzantine fortress Sania-na or its earlier representative. Sianas calls it Kamissa, "the fort," which must be the Κάμησος of Polybius (xxv, 4). The use of the hieroglyph of hand or arm by the Hittites influenced their use of the Sumerian Â, "hand," "arm." Thus, Â-DU (*âttâ*) is used for *attas, âttâs*, "lord," Â-AS (*addu*) for SI+DU-*is*, "general," Â-SAL, Assyrian *Sarkhattu*, for *Kharâu*, "an Amazon" (*Keilschrifttexte aus Boghazköi*, i, 42; ii, 7–9).

[2] It is noteworthy that the same oblique stroke is found on the famous Disk of Phæstos.

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generally represented only by a part of itself, a man or animal, for example, by the head alone. Hence more than one part of an object can be used indifferently for this purpose and so possess the same pronunciation; thus, a chariot is represented by its wheel and front as well as by its body, a ram by its head as well as by its horn. In different localities the same object may assume different forms; the Syrian chair, for instance, as depicted at Hamath is somewhat different in shape from that of Asia Minor. In the later cursive writing, again, many of the characters acquired forms which are sometimes difficult to identify with their originals.

The vowels seem to have been obscure and uncertain as in English. As in English, also, *r* was untrilled, and was a vowel rather than a consonant. But it must be remembered that the pronunciation, especially of the vowels, would have varied in the different localities and periods to which the inscriptions belong. By the side of *u* was *ü*, which often passed into *i* or *y*. The sonant nasal of the accusative is occasionally omitted in writing, and was probably but little heard.

W passed into *y*, as *u* or *ü* into *i*. This characteristic of the Hittite languages influenced the language of Canaan, the passage of *w* into *y* being a well-known characteristic of Hebrew. Perhaps the Greek *Βάκχος* and *Ἴακχος* came from the two-fold pronunciation of some Hittite word for "wine".

As in Assyrian and Sumerian, no distinction was made between *m* and *w*, *w* being ordinarily represented by *β* in Greek and by *p* and *b* in Egyptian and cuneiform. It is probable that in Assyrian this very non-Semitic characteristic was also due to northern influence.

As in other Asiatic languages the vowels could be nasalized, so in the proper name Garpa-rundas by the side of Khiteruadas.

L is rare, in this affording a great contrast with Vannic. Its place in grammar appears to be taken by *n*, and I would accordingly divide the Asianic languages into the two groups of *l* and *n* languages. This would explain such double forms

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as Khali-galbat and Khani-galbat,[1] or the equivalent pronominal forms *li* and *ni* quoted in Assyrian lexical tablets from what are presumably Asianic dialects (cf. V.R. 27, 4, 57; 27, 34, 43). On the other hand, the Greek *l* often replaces *r* before a semi-vowel; e.g. Olba for Urwa, while conversely Tabal, Tubal, appears as Tibareni. The interchange of *l* and *n* is common enough in all languages; final *l* becomes *n* in colloquial Egyptian Arabic, and even in English *chimbley* is the vulgar pronunciation of *chimney*.[2]

Final *s* tended to pass into *h* and then disappear altogether. In the nominative singular its occurrence in the script seems to be etymological only; at all events it is more often dropped than written in the case of proper names in *-uan, -ian*.

There were at least two sibilants, *s* and *z*, but at present it is not possible to distinguish between them in transcription. The patronymic suffix *-si* is represented in Assyrian by *-zi*, as in Tarkhu-na-zi, "son of the land of Tarkus," Tarma-na-zi, the modern Turmannin; the Biblical Ashkenaz is similarly Aska-na-zi, "son of the land of Aska" (whence the names of Askanios and Aska-ênos).[3] On the other hand, we find in Greek Suennesis, from Zuin, the Moon-god, while Tarsus, Tarshish, is written Tarzi in Assyrian and Aramaic. In the Ordek-burnu inscription the demonstrative *yisi* is written יצי.

The interchange of surds, sonants, and even aspirates in the Hittite region has long been known both from the Tel el-Amarna tablets and from the Assyrian inscriptions, and is reproduced in the Cypriote syllabary, where the same character represents surd, sonant, and aspirate. The Asianic *q, kh*, is made the equivalent of the Semitic *ghain* in a name like that of Mer'ash, and could be lost altogether like *qôf* in Cairene Arabic. Hence *Μάρασις, Τάρασις* for Mer'ash, Tarkus.

[1] Or *galbe, kalbe*, as it should more probably be read. Does this represent the Khalbi(s) of the Kaskian texts?

[2] Similarly, Parnassos on the Halys is the modern Parlasson.

[3] In the Cappadocian tablets the name appears as Waskhania (e.g. Contenau, *Tablettes cappadociennes du Louvre*, 4, 8).

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The dentals, as in Boghaz Keui Hittite, were confounded together, and were especially addicted to the development of a preceding sonant nasal (as in *rundas*), which, however, was seldom written.

R, as I have said, was pronounced as in English, and before a consonant or at the end of a word could be treated as a vowel. Hence the name of Karkamis is now and then written Kĕ-ka-mis. On a seal the name Garpa-runda appears in Aramaic letters as גרבד.

Grammar.—The leading characteristics of Kaskian grammar are those of the other Asianic languages. Adjectives are formed by the suffix *-wa, -wi*, which later passes into *-ya, -yi*. The ethnic suffix is *-na*, by the side of which we also find *-ni*. A territorial suffix is *-mias*, "of the land of," to be distinguished from the purely adjectival *-wis* and *-mis*, the latter of which corresponds with the Greek *-μο*, as in *Tarkamos*. -Kanis, from an earlier *-qanis, quanis*, a compound of *-ka* and *-ni*, denotes "of the race" or "family".[1] The name of the agent is denoted by *-tis*, as in *Nana-tis*, "the Nanayan," *tua-tes*, "charioteer," *Karkamisiyas-na-tis*, "he of the land of Carchemish." The gentilic suffix is *-sis*, as in *Uwinia-si-s*, "son of Uwinias"; it also denotes "the child of" a city or country. In *amis-tus*, "chief swordsman," *-tus* has the signification of "chief"; *-kus*, as in *amis-kus*, must have much the same meaning.[2] Many proper names are formed from those of deities by means of the suffix *-wan, -yan*, which apparently corresponds with the Greek *-ων*. Another suffix is *-(n)da*, as in Amikandas, "the lowlanders."

The case-terminations of the noun are Asianic, and agree with those of Vannic, Mitannian, Boghaz Keui Hittite, Hittite, and Lycian: nom. sing. *-s*, acc. sing. *-n*, oblique case a vowel according to the stem, the genitive, however,

[1] Or rather, perhaps, "people," since we find *Markhas-kanis*, "of the people of Mer'ash," and similar formations, as well as the form *-kan-mi*, "in the land of the people of" such and such a locality.

[2] M. liii; xxxv, 3; xxxvi, 2.

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being often denoted by *-wi, -yi*; nom. and acc. plur. *-s*, gen. plur. *-an, -wan, -yan*. Postpositions are the locative *-ta, -ti, -da, -di*, and the elative *-mi* (?). The vocative had the same termination as the nominative. A peculiar form of the accusative singular is that in *-mia, -mi*, which is used with words denoting "a place", like *gû(s)-mia*, "the place of the sacred ox-horn," *di-mia* or *ti-mia*, "a temple" (perhaps from *ti*, "to consecrate"). In the Ordek-burnu inscription it is represented by פא in the word הכפא, "sanctuary," the Kaskian *aku-mia*, which must have been pronounced *akuwia*. In place of the ordinary genitive we sometimes find the adjectival *-syi* (Lycian *-hi* for *-si*); e.g. *Uan-kua(n)-nas-yi* and *Uan*-UAN-*kua(n)-ni-(n)as-yi*, "of the Unqians" (M. vi, 4, 5), *mia-a Tarku-ku-uan*-YIWIS-*yi-s-yi*-D.A. UAN-*uan-yi*, "city of the god of the Tarkians" (or, perhaps, Sandians, i.e. Herakleia, M. xxxii, 4), *kuan-a-(n)as-yi-mia a-na-is*, "king of Hierapolis." In certain proper names, moreover, *-s* seems to be a suffix of the genitive singular.

The prefix *a-* denoted a person; thus from *kuanis*, "consecrated," was formed *a-kuanis*, "a priest," from *mis*, "a knife" or "dirk", was formed *a-mis*, "a swordsman." The Kaskian scribes regarded this prefix sometimes as the word for "man", sometimes as the word for "speaker".

The adjective usually preceded the substantive with which it agreed in number and case. There were no genders. The genitive usually preceded the governing noun, the verb coming at the end of the sentence.

The 1st pers. pron. sing. was *yimis*, or, rather, *yiwis* in the nominative,[1] the dative being *ami, amia* (or *imi, imia*), M. xxxi and v, 4. In the abbreviated form *-mei* (cuneiform *-me-e*) it could be attached to a noun, as in *ana-mei*, "I am king" (M. xxxii, 1; so, too, x, 8). The 2nd pers. pron. was *tu* in the genitive: *me-s i-us-is-tu*, "builder of thy high-places" (C. A3, 4). Of the 3rd pers. pron. I know only the

[1] Cf. Vannic *ies*.

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acc. plur. *sena* (M. xi, 5), which is affixed to the verb, as in Mitannian.

The poss. pron. of the 1st pers. sing. was *mis*, in the plur. *na(s)*; e.g. TE-*a-na*, "our sanctuary" (C. A1, *a*6), *atta-na-a*, "to our father" (C. A6, 5).

The numerals, so far as I have been able to ascertain them, are *ua*, "one," *tuaus*, "two" or "two-fold" (M. lii, 2), *kes*, "three," *mi*, "four," *nitini* and *nitinna*, "six" (C. A1, *a*3), *qaṃmi* and *qaṃmis*, "nine," "nine-fold," *kar*, "ten," and *gu*, "one hundred."

The demonstrative is *yi(s)* or *wi(s)*, *yia*, *ya* in the accusative. A fuller form is *yisis*, which becomes *yis-i*, *yis-a* in the accusative, and is written יזי in the Ordek-burnu inscription. *Yis'i* seems the older form. From *yis* was derived the adverbs *yismia*, *yismi* and *yimia*, *yimi*, "here" (literally "in this place"), as well as the adjective *yismianas*, *yimianas*, "of this country." The plural is *yîs*, *wis*. Another demonstrative was *tua*, which we find in *my-tua*, "of this land" (M. xxi, 3; in M. i, 3, *mî-a-tu(a)* may be "of thy country").[1] Whether a word *ai*, which follows a noun in some passages, is a demonstrative I do not know.[2]

[1] Possibly *ti* in M. vii, 1, 2, is the demonstrative rather than the locative suffix (*(gu)-ka-s-mi i-us-i-ti*, "for this high-place").

[2] The inscriptions attached to the series of figures in C. A7 will illustrate the use of the demonstrative and at the same time serve as a practical verification of my system of decipherment:—

a. (1) *yi-s-mia-a* KA-*kuan-n-i-s Yi-is-mi-a-na-i* ID.-*yis akuan-ni-i-(y)is a-mi-mi-a-ian yi-mî ki-i-is* (2) *ky-ian ti-mi-a-ian* UAN-KA-*ti sy*(?)-*mi* AGU-*a-ku-s-mi*-MI *akuan-na-s a-ś* (3) *ku-wi a-mis-s*, (1) "Here (is) the priest of this land, the supporter of the king, the arch-priest of the people: here (2) giving the gift, an altar in the temple-court I have erected as arch-priest of Agusimis. Now (3) I have done (it), being swordsman."

b. yi-mi-MIA-*a I-my-yu-s Amis-tu-ś*, "Here is Imois the chief swordsman."

c, d. yi-[*is-*]*a Kuan-i-Tarku-mi*-MI-*ś yi-s-mi-a*-MIA, "This (is) Kani-Tarkamos." "Here (is)"

e, f. AMIS-*s mî Tarku-ku-wi-s yis-mi-a Ku-ni-wi-s-mi-ś*, "the swordsman of the country Tarkois. Here (is) the attendant of Kuniwis."

g. yi-s-mia-a I-si-ku-wî-s-mi-s, "Here (is) the attendant of Isikois."

h. yi-s-a Isi-ka-wy-s, "This (is) Isikois."

i. yi-s-a Tarku-di-mi-û-s yi-is-s-a Is(i)-ka-wî-s-mi-s, "This (is) Tarkondemos; this is the attendant of Isikois."

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There were at least two conjugations (or tenses ?) of the verb, in one of which the 1st person of the past tense was expressed by *-mi*, and in the other by *-wi*, which passing through *-yi* became *-i*. *-wi* is the *-bi* of Vannic.

The 3rd pers. sing. (and also plur.) terminates in *-tu*, *-ti*, and *-t* (as in Lycian, Lydian, and the Vannic plural); e.g. *es-tu ginas*, "the king has erected" (M. liii), KUAÑA-*ti*, "may she bless" (M. xi, 5), *Agusimis* ID.-*a-ti mia-na*, "may Agusimis bless our land" (C. A4, *d*). We may conclude from the last two examples that the precative was denoted by *-ti*.

Much use is made of the present participle in the nom. sing., which can also take the place of a 3rd pers. sing.; thus we have *kîs kyn timian* UAN-KA-*ti sy-mi*, "giving a gift, I have erected an altar in the temple-court" (C. A7, *a*2).

A derivative conjugation was formed by the suffix *-mi*, and we have what is probably a causative in *nas-kuan-yi*, "I have set up" (M. xxxi, 1; xlvi, 1), by the side of *nas-me-w-i* (M. xxxiii, 4).[1]

The only conjunction I know is *aś*, which occurs at the beginning of a sentence in the sense of "now", "behold" (C. C6, 4, 7, etc.; cf. M. xi, 3).

Adverbial prepositions are *miami*, "in front of," also used as a postposition, and *agu*, "behind." *Kasmi*, *kesmi*, probably signifies "for", "on account of" (M. i, 3; vii, 1, 2).

Linguistic Position.—The language of the Hittite hieroglyphic inscriptions is that of the Kaskian and Moschian tribes, who in the thirteenth century B.C. overran Cilicia, Cappadocia, and Lesser Armenia, established themselves at Carchemish and Melid, made Tyana their capital and founded the second Hittite empire, called "Cilician" by Solinus,

j. (1) *yi-s-mi-a*-MIA *Na-î-is-i-ś kuan-ni-i-s Nanay-wy* (2) *yi-me-s* DET.-*isi-mî a-kuanis yi-me-i-ś* ISI-MI-*s*, (1) "Here (is) Nawisis the priest of Nana: I (am) supreme arch-priest of the land, I (am) supreme over the land." Isi-kuwis is really a title signifying "lifter-up of the standard".

[1] I should now render this last passage, which reads: *a-(a)nin agu-ti-is a-kuana-s nasmewi*, "the (sacred) stone I the priest of the inner shrine have set up."

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which extended from Syria to Lydia. Along with the Tabal, Tubal, or Tibareni, and other tribes, among whom Yavan, the Ionians, would have been included, they overthrew the older Hittite empire which had its centre at Boghaz Keui, made themselves masters of Northern Syria and threatened Egypt, which was saved only by the victories of Ramses III. Tiglath-pileser I tells us that under their "five kings," the Moschians had occupied the Assyrian dependencies of Alzi and Burukuzzi, on the Arsanias, and that "4,000 men of the Kaskians and Urumians, soldiers of the Hittites", had conquered the Assyrian province of Subarti. The old song quoted in Gen. ix, 27: "God shall enlarge Japhet (a Cilician deity according to Stephanus Byzantinus) and he shall dwell in the tents of Shem, and Canaan shall be his servant," must belong to the time when the Cilician empire was established.

We may assign the Kaskian occupation of Carchemish to about 1200 B.C.[1] The conquerors carried with them the new form of culture, which has been brought to light by the British Museum excavations on the spot—the practice of cremation and the use of "Hittite" seals, special types of pottery, hieroglyphic writing, and the general substitution of iron for bronze. The kings traced their descent from Mita or Midas.

Kaskian Hittite was an Asianic language, displaying the same combination of Asianic and Hellenic elements as are found in other languages of Asia Minor. It is becoming clear that in the prehistoric age Asianic and Indo-European languages were in close geographical contact in that region; indeed, Dr. Forrer believes that Hittite, "Luvian," and the parent Indo-European were sister forms of speech. That the Greek language contains many words of Asianic origin has long been suspected, and where there is extensive lexical borrowing there is also grammatical borrowing.

It is also becoming evident that the Asianic languages

[1] The Hittites were already established there in the time of the Assyrian king Tiglath-pileser I (1110 B.C.); cf. his Annals, v, 49.

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exercised some influence upon Northern Semitic, that is to say, Canaanite or Hebrew, Aramaic and Assyrian. The use in Assyrian of the prepositions *ana* and *in* (later *ina* through assimilation) is an example of this.

The manufacture and use of bronze seem to have originated in Asia Minor. At all events it was from that country that a knowledge of the metal was carried to Babylonia, Canaan, and Egypt, and with the bronze would have come some knowledge of the language of the bronze-makers. At an early date, also, Asia Minor became a main source of supply of silver and lead to the ancient Oriental world, and iron followed at a later date.

It is not surprising that words of Asianic origin occur in Sumerian like *guskin*, "gold," the non-Indo-European *oski* of Armenian, or *annak*, "lead," the Armenian *anag*. It was from the highlands of Armenia that the brachycephalic peoples of Western Asia made their way to the south.

By way of appendix I add a note upon the two rock-inscriptions of Lydia, which had much to do with the discovery of the Hittite empire, and about which more can be said to-day than was possible a few years ago.

There is a good cast of the inscription attached to the figure of the Pseudo-Sesostris at Karabel in the Museum of the Fine Arts at Chicago. Here the second character looks like the ox-horn on a pole (*gusias*), but I confess that when I visited the monument in 1879 it seemed to me rather to resemble what we now know to be *kuanis*, "a priest." The characters in the third line are now visible in the cast, and are *amis-ku* (as in M. liii). Consequently the whole inscription reads: (1) *ku* . . . *nawy* (2) *Khalwi-nay* (3) *amis-ku*, (1) "the image of . . . the king, (2) of the land of Khalwis (3), the chief swordsman." Is Khalwis the Halybê of Homer (Il. ii, 857)? At any rate, "the land of Khalwis" seems to be the nameless "City of Midas" near Kumbet, since a hieroglyphic inscription engraved on a rock at its entrance reads: "The rock of Khalwis" (M. xxxvi B). Khalwis corresponded to Kybelê,

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and since it could also be read Khubis, the name of the country ought perhaps to be Khuba or Komba.

The copy of the "Nisbe" inscription on Mount Sipylos (M. xxxviii, 5) requires correction, the boot under the bull's head being part of the head itself, which should face the reverse way. The first character is the outstretched arm found on Mount Argæus (*Annals of Archæology*, i, pl. viii) (where it is followed by *Amma* as on Mount Sipylos), at Kara-Dagh (2*b*) and elsewhere; it signifies προσκύνημα, "adoration." Consequently the translation of the inscription is: "adoration to Ammi (*Amma-mi*), queen of the rocks." The same title is applied to the goddess Amma or Ammi at Emir Ghazi (M. l, 2).[1]

NOTE.—C. denotes *Carchemish*, part i (1914), by D. G. Hogarth; M. Messerschmidt's *Corpus inscriptionum Hettiticarum*, ii *sqq.* (1900–6); ID. "ideograph".

[1] The list of Carchemish kings hitherto recoverable from the inscriptions is as follows: Yakhans (C. A1 *a*), Khalbi-iyaki(?)me (M. x), Kanas (C. A2, 3, 11; M. ix, xi), Yimiannas (C. A5, *a*1), Imois (C. A6, 7), and Agu-sis, the father of Kanas, who was Swordsman of Nukhassi and lord of Melid (C. A11, *b*1, A4, *b*7). Yimiannas could also be read Yiwiannas, and be compared with the Assyrian Yamanu, Yavanu, "Ionian." It must be remembered that the hieroglyphs were employed for more languages than one, and that consequently where the characters are used ideographically (and to a certain extent, at all events, phonetically) they would have different values in the different forms of speech. At Boghaz Keui, for example, they would not have the same pronunciation as at Mer'ash or Carchemish. That was certainly the case in Cilicia, where an Indo-European language, which we may call proto-Ionian or Yavanian, was spoken. On the seal (misnamed "boss") of Tarkondemos the goat's head (*is* in Kaskian) is *tarku*, Greek τράγος, and the temple (*guana* in Kaskian) is *dimme*, Greek δόμος. So on the bilingual seal of Indi-limma in the Ashmolean Museum the hieroglyphic legend reads "Life-stone (NA-ZI at Boghaz Keui) of Indi-limma", the name of the deity being represented by a character not found elsewhere, while *limma* or *livva* is expressed by the stone which had the value of *ani*, *ana*, syllabically *na*, in Kaskian. As Tarkondemos is "the temple of Tarkus", so Indi-livva is "the stone of Inda", *livva* being the Greek λεύω, "to stone," Doric λέυς, "stone," usually identified with λᾶας, which is, however, more probably a loan-word from Asia Minor.

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MISCELLANEOUS COMMUNICATIONS

A CHINESE COURT OF JUSTICE

In the lecture hall of the Royal Asiatic Society in London hangs a painting, probably by a Chinese artist, representing a trial which is noteworthy as being the first Chinese trial at which Europeans were permitted to be present.

On 24th February, 1807, a Chinese was said to have been killed in a rowdy affray between English sailors and Chinese townsmen at Canton; and the authorities held three trials to detect the culprit and determine his guilt among fifty-two sailors who were that day on liberty from the Indiaman *Neptune*. These three trials were held in the great hall of the old factory of the English East India Company, the hall being draped for the purpose with cotton cloth striped red and yellow. The painting represents the first trial, on 9th April, which was presided over by seven Chinese officials—so the records state, but only six could be identified in the records, and the painting shows only six. Of these, five have tables before them, with judgment vases on the tables; the sixth, the representative of the Hoppo, has no such table, since he exercised no judicial function. The officials were the following:—

At the middle table:—

In the middle the Kwangchow Fu, the Fu or Prefect of the Prefecture of Kwangchow (Canton).

On his left (the spectator's right, the Chinese side of honour) his predecessor as Kwangchow Fu.

On his right the Künming Fu, an officer having jurisdiction over Macao.

At the side table on his left, the Punyü Hien, the magistrate of the eastern half of the city of Canton and the district to the east, in which lie Whampoa and the foreign shipping.

At the side table to his right the Namhoi Hien, or magistrate

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of the western half of the city of Canton and the district to the west, in which lie the European factories and the scene of the riot.

The Hoppo's deputy sits retired at the spectator's left, between the Künming Fu and the Namhoi Hien.

The three at the middle table appear to have transparent blue buttons on their hats, indicating the third rank; the pusa on their breast is not fully delineated, but for that rank would be a blue peacock for the two Kwangchow Fu, and a leopard for the Künming Fu; if the buttons are opaque blue, they indicate the fourth rank, of which the insignia are a wild goose for the civilians and a tiger for the military. The three at the side all appear to have crystal buttons, indicating the fifth rank, of which (for civilians) the pusa is the silver pheasant. These were the judges.

In the pew on the spectators' right (the real left, or side of honour) are four Hong Merchants. These are in order of seniority:—

Puankhequa, who had been a Hong Merchant since 1788, and since 1794 head of the Gild Merchant, Co-Hong, or Consoo of Canton; retired from business at the close of this year.

Mowqua, oldest of the merchants; had made his arrangements for retiring this season, but this affair depleted his purse, and he had not sufficient money left to pay for the privilege of retirement.

Puiqua (known also as Howqua).

Conseequa.

These four all wear the red coral button, indicating the second rank, of which the pusa is the golden pheasant. This puts them in a higher rank than the judges; but the judges acquired theirs by examination and official appointment, while the merchants paid money, much money, for theirs. The youth in a long red gown, standing next to Conseequa, also has a red button on his cap; but it is of silk, and has no significance.

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In the pew on the spectators' left are the English representatives :—

Captain Robert Rolles, R.N., of H.M.S. *Lion* (Lord Macartney's ship in 1792-3), who showed great tact in a matter in which he could not venture to intervene too freely, and whose firmness on occasion was such as to command the respect of the Chinese.

John William Roberts, President of the Select Committee.

Thomas Charles Pattle, second member of the Select Committee.

William Bramston, third member of the Select Committee.

Sir George Thomas Staunton, Bart., writer and interpreter. He is the page in the suite of Lord Macartney at the reception of the Emperor Kienlung in 1793, as shown in the sketch by William Alexander on the opposite wall; both pictures were presented to the Society by Sir G. T. Staunton. In 1823 he and H. T. Colebrooke founded the Royal Asiatic Society, to which he presented 3,000 volumes of Chinese.

In the painting the three supercargoes, Messrs. Roberts, Pattle, and Bramston, represent dignity and enjoyment of the good things of this life; and the records of the East India Company show that they were men of capacity and of high commercial honour. Sir G. T. Staunton, then in the 26th year of his age, retains the natural slenderness of his years, and still has a waist.

The fifty-two sailors were introduced in batches of five, as shown in the painting. The two marines lent dignity to the court; Captain Rolles had proposed to show honour to the judges by a more numerous guard of red-coated marines, but the Chinese merchants gently hinted that such an attention might instil more fear than pleasure.

H. B. Morse.

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PSALM CXXX

I suggest below, I believe for the first time, an arrangement of Psalm cxxx in the so-called Qīnah, or elegiac, metre. Each distich is an illustration of what Dr. G. B. Gray calls *echoing rhythm*, with three stresses in the first line and two in the second. Dr. Briggs treats the Psalm as in trimeter throughout. The arrangement is secured (1) by treating the Divine Names, יהוה and יה, as interpolations. Their omission makes the Psalm Adonaijic (cf. Ps. lxxxvi, which has many verbal similarities). (2) By omitting as glosses the "and to His word my hope", ולדברו הוחלתי, of verse 5; and the "Let Israel hope in Yahweh", יחל ישראל אל־יי, of verse 7 (omitted also in Gk. and by Briggs). (3) By omitting the והרבה of verse 7, as making the line too long. I am doubtful as to the proper stressing of משמרים, and in verse 4 I have followed the Gk. ἕνεκεν τοῦ ὀνόματός σου.

A Song of Ascents

I.

Out-of-the-deeps I-call-Thee, Lord:
Hearken-to my-voice.
O-let-be Thine-ears attentive
To-the-voice-of my-entreaty.
If-iniquities Thou-shouldst-mark, Lord,
Who shall-stand?
For with-Thee (is) forgiveness,
Because-of Thy-Name.

II.

I-wait, my-soul waiteth:
My-soul (is) toward-the-Lord,
More-than watchers for-the-morn,
Watchers for-the-morn.
For with-the-Lord (is) kindness,
With-Him (is) redemption;
And-He shall-redeem Israel
From-all his-iniquities.

Herbert H. Gowen.

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DEVEŚVARA

The date of Deveśvara, author of the *Kavi-kalpa-latā*, a treatise on rhetoric, prosody and composition of verses, can be approximately settled from the internal evidence supplied by the text itself. The *Kavi-kalpa-latā*, as its name implies, belongs to that group of writings which is obviously directed to the practical object of *kavi-śikṣā* or instruction of poets, and closely follows, in its treatment of the subject and general arrangement, Arisiṁha and Amaracandra's well-known work on the same theme. It is not difficult to show, even from a cursory comparison of the two works, that Deveśvara not only draws his inspiration from Arisiṁha's *Kāvya-kalpa-latā* and Amaracandra's commentary thereon, but also slavishly copies wholesale the text of his predecessors, wherever the respective texts deal with the same theme. Deveśvara borrows literally most of his definitions from Arisiṁha (e.g. *adbhuta-vidhi*, p. 130 ed. Calcutta 1900 = Arisiṁha, p. 93 ed. Benares), and even repeats the illustrative examples word for word. Compare, for instance, the long passages appropriated by Deveśvara, pp. 157–60 and pp. 36–7, from Arisiṁha, pp. 135–7 and pp. 30–1 respectively. This copying is found not in isolated instances but practically wholesale throughout the work, so that it is highly probable that Deveśvara must have had the text of his predecessors' work before him when he composed his own. This will place Deveśvara later than the middle of the thirteenth century, thus enabling us to arrive at one terminus of his hitherto unknown date.

Apart from the probable borrowing from Deveśvara (e.g. pp. 27–37, cited above) by Keśava Miśra (*Alaṁkāra śekhara*, pp. 57–69, passage beginning with *nṛpe kīrtipratā-pājñā*), who belongs to the second quarter of the sixteenth century, Deveśvara is also cited in the *Śārṅgadhara-paddhati* (pp. 8, 14, 29, 34, 35, 39, 85, 205, 611). Of the verses which are quoted under his name in this anthology, one at least (*nāga-viśeṣe śeṣe*, p. 85, No. 545) occurs in the text of the

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Kavi-kalpa-latā (p. 155), and this makes it probable that the poet Deveśvara, cited in the *Paddhati*, is the same as our author, and will presumably place Deveśvara earlier than A.D. 1363, the date of compilation of the anthology, furnishing us with the other terminus.

It is probable, therefore, that Deveśvara should be placed in the century between the middle of the thirteenth and the middle of the fourteenth. Allowing roughly half a century to elapse between him and Arisiṁha, on the one hand, and a similar period of time roughly between him and the compiler of the *Paddhati* on the other, we may reasonably fix the beginning of the fourteenth century as the approximate date of our author. This is apparently confirmed by an allusion in the text. In one of the *samasyā ślokas* (p. 200) there is a panegyric of one Hammīra-mahīmahendra. If this Hammīra is the famous Cauhan prince, who is the hero of Nayacandra Sūri's *Hammīra-mahākāvya*, then Deveśvara was probably a contemporary of or flourished immediately after that prince, who began his reign about A.D. 1283 (ed. Kīrtane, v, 56, also p. 27; Bhandarkar, *Rep.* 1882–3, p. 43; *Rep.* 1887–91, pp. lxvii ff.). In the text Deveśvara describes himself as the son of Vāgbhaṭa, chief minister (*mahāmātya*) of the king of Mālava.[1] This prince was probably one of the chiefs of the Tomara clan, who superseded the Paramāra dynasty of Mālava, and who in their turn were followed by the Cauhan princes. This makes Deveśvara's eulogy of the Cauhan prince Hammīra intelligible. In the verses cited as Deveśvara's in the *Paddhati*, he praises the poet Govindarāja (p. 29), Bhoja (p. 205), and also Hammīra (p. 611). Five verses of Govindarāja are quoted in the *Paddhati* itself (pp. 92, 146, 166, 469, 506), while the verse *vayasyāḥ kroṣṭāraḥ* is attributed in the same anthology to Hammīra-narendra, who, as we know, was the patron of

[1] The text in the Calcutta edition (p. 18, l. 5) reads *mālava-pati*, which is clearly a mistake. The variants in the Bibl. Indica ed. are *mānava-pati* and *ānada-pati*, of which the latter seems to be the correct reading from the author's own comment on the word (pp. 19–20). See also i, 2.

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Rāghavadeva, Śārṅgadhara's grandfather, and who is apparently the prince referred to by Deveśvara.

SUSHIL KUMAR DÉ.

LETTERS OF MAHRU

With reference to the interesting attempt of Colonel Sir Wolseley Haig, in the *JRAS.*, July, 1922, pp. 319–72, to establish critically the exact chronology of the early princes of the Toghluqide dynasty at Delhi, it may be not entirely useless to mention a little known, or, probably, even altogether unknown work belonging to the same period. It is a treatise on *inshā*, i.e. a collection of specimens of epistolary style, compiled towards the end of the eighth century A.H. (or fourteenth century A.D.) by Māhrū, or 'Ayn-i-Māhrū, as he usually calls himself, or, more officially, 'Abdu'l-lah Māhrū. He was, as one may gather from the text, a high official, apparently a governor of Sind, under the Toghluqide princes. Unfortunately, the only manuscript copy which I have examined (which may be unique), " F 11 " of the library of the Asiatic Society of Bengal, Calcutta, is very defective. The preface and the beginning of the work, as well as portions in the middle and its end, are lost in this transcript (which is apparently at least four centuries old, perhaps even older).

The part extant contains 123 letters, which seem to be " true copies " of various specimens of original correspondence, not simply exercises written on fictitious topics. Their order is more or less systematic : first come documents issued by the Central Government, such as appointments of governors, wazirs, etc. Then follows official, diplomatic, and business correspondence with various officers, divines, landowners, Indian local chiefs, etc. And finally there are a considerable number of private and family letters of Māhrū addressed to his various sons and friends.

Naturally, the documents and epistles are reproduced here for the purpose of demonstrating peculiarities of their style

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only. This is why their dates are almost invariably omitted. Only accidentally the year A.H. 763 (or A.D. 1362) is mentioned on fol. 47 *verso*. On fol. 227 the year 59 (A.H. 759 ?) is referred to. Fīrūz Shāh is referred to on fol. 70. Several letters are addressed to Ḥasan Gangū, the founder of the Bahmanide dynasty in Daccan (A.H. 748–59 or A.D. 1347–58). On folios 33 v.–34 v. an official message is cited containing a mention of the death of a Sulṭān and accession of Muḥammad (the third ? in such case it belongs to the year A.H. 792 or A.D. 1390).

All this is fairly sufficient to identify the period to which the correspondence pertains. But there are also a great number of references to various officials, divines, etc., and some of them may be identified in other works on the history of that time. Not being a student of Indian history I have not made any special research in this direction, but it may be very interesting.

However incomplete and haphazard these selections from actual correspondence of that time may be, the collection nevertheless contains genuine historical documents, and in such case undoubtedly possesses considerable interest for a student of the Toghluqide dynasty. Even unofficial letters have their own value as depicting various sides of the contemporary life of the country, and a thorough study of the book by a specialist historian will probably reveal much new and important material.

W. IVANOW.

CALCUTTA.
24th August, 1922.

THE OROPUS OR EUROPUS TITLE OF CARCHEMISH

My corroboratory note [1] upon Professor Sayce's important identification of the Greco-Roman "Oropus" or "Europus" with "The Older Hierapolis or Ninus" of the Romans as a title of Carchemish does not appear to have pleased

[1] In April number of *Journal*, pp. 267 f.

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Mr. Woolley. In the July number of the *Journal*[1] he attempts to controvert several points in my note, and in so doing perpetrates not a few misrepresentations and absurdities. As these misrepresentations are calculated to seriously mislead the readers of the *Journal*, they call for refutation.

Apropos of Professor Sayce having clearly established in his Geographical Notes, under reference, the literary evidence for the use by Ammianus Marcellinus of the title "The Older Hierapolis or Ninus" for Carchemish, the modern Jerablus, I incidentally remarked in introducing my supplementary note: "The usual Greek and Greco-Roman name for the strategic town occupying the site of the old sacred Hittite city of Carchemish was 'Hierapolis', which Greek name is generally assumed to be the source of the modern name by which the site is known to the Arabs—'Jerablus'."

On this Mr. Woolley remarks "so far from being 'usual', the name (Hierapolis) is not supported by any literary or archæological evidence". Perhaps I should not have used the word "usual", seeing that so few references to Old Hierapolis are found in extant classic literature. But it will require, however, something more than the mere *ipse dixit* of Mr. Woolley to sweep aside Professor Sayce's evidence for the *literary* usage by the Greco-Romans of the name "The Older Hierapolis" as a title for Carchemish or Jerablus. And as regards *archæological* evidence for the Greco-Roman usage of "Hierapolis" for Carchemish, it is yet too early in the initial stage of the excavations at Carchemish to say positively that no archæological evidence for it exists.

The obvious equation of the name "Jerablus" with "Hierapolis" is accepted by the authorities as etymological identity, and reiterated by Professor Sayce in his note as: "the name Jerablus, which is Hierapolis," is curtly dismissed by Mr. Woolley as "a mere theory . . . Dr. Hogarth has shown (*Carchemish*, pt. i, pp. 21 *seq.*) that the derivation is unnecessary". The fact, however, is that Dr. Hogarth, on

[1] *Id.*, pp. 427 f.

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the contrary, admits therein the probability of the relationship of these two names, saying "it does not however follow that the name Hierapolis has nothing to do with the parentage of Djerablus [*sic*]"; and "it is probable that the termination *-blus* is πολις".[1]

The confusion between "The Older Hierapolis" Jerablus or Carchemish, and the later "Hierapolis", so named by Seleucus Nicator[2] for the Upper Syrian city of Membij, the Syrian *Mabug* about 25 miles S.W. of Carchemish, and a later headquarters of the Mother-goddess cult, is of long standing. It is already found in the early Syriac (or "Peshito") second century A.D. version of the Old Testament, wherein "Mabug" is substituted for the "Karchemish" (Carchemish) of the Hebrew in 2 Chronicles, xxxv, 20. And Professor Sayce has explained how his confusion obviously occurred.[3]

Hitherto previous writers have assumed that the modern Arab name "Jerablus" is a direct survival or derivation of "Hierapolis"; but in my note I ventured to suggest that both of these names might be independently derived from, or coined upon, an earlier Hittite name. Such an earlier form of the name seemed to me postulated by the title given by Homer to the Trojan hero-chief of the *Kētei* (who are now recognized to be "Hittites"), namely *Εὐρύπυλος Eurupulos* (misspelt in my note through clerical oversight "Europulos"), who presumably had his capital at Carchemish, and had his Hittite name thus Grecianized to give it an Hellenic form and meaning. This name, I also remarked, obviously contained the elements of the later Seleucid city-name for Carchemish, namely "Oropōs" or "Europus".

This, as I deem it, reasonable suggestion has apparently roused the ire of Mr. Woolley, and he attempts to demolish it by showing what he thinks to be the baselessness of what he calls the "assumptions" on which it rests. He states that

[1] *Carchemish*, pt. i, p. 24.
[2] See reference to authority in E. R. Bevan, *House of Seleucus*, i, 218.
[3] Sayce, *The Hittites*, 1910, 95.

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I have based this suggestion on four erroneous "assumptions" which he disposes of to his own satisfaction. I shall now deal with his allegations *seriatim*. He writes :—

(*a*) *he assumes that the people whom he calls "Ketei" (Homer calls them Keteioi) are the Hatti.*

This is not correctly cited by Mr. Woolley. I called these people, as they themselves spelt their names, *Khatti* (the "Hittites" of modern writers), and I identified them with the Homeric *Kētei*—the Hellenic plural affix *oi* is necessarily omitted in obtaining the native form of such a foreign name for comparative purposes. This identity of the "Kētei" with the "Khatti" (or "Hittites") is no assumption of mine ; but it is an obvious fact admitted by the leading authorities (for instance, Professors Sayce and Petrie after W. E. Gladstone) who have long recognized that the ancient ruling race of Asia Minor and Syria, who had Carchemish for long as a chief capital and called themselves "Khatti", were identical with the *Kētei* of Homer, the *Kheta* Syrians of the Egyptians, and the *Heth* or *Hitti* of the Hebrews, which latter name is Latinized and disguised in our Old Testament version into "Hitt-ites".

(*b*) *he assumes that the "Ketei" leader is named after the "Ketei" capital, stating that Homer commonly gives a chief the name of his principal town, and that "Europylos" in Greek means "wide-gated" and could only be applied to a city. It would be difficult to parallel from Homer the alleged Homeric usage. Unfortunately, too, "Europylos" which looks so attractively like "Europus" . . . is a pure invention of Colonel Waddell's—Homer calls the chief "Europylos", which means "wide-gated", but cannot be twisted into "Europus".*

This, again, is not correctly cited—it is largely a jumble of nonsense of Mr. Woolley's own invention. I nowhere used the word "Europylos", and deliberately avoided the hybrid arbitrary, though fashionable, transcription "Eurypylos" for the Homeric Εὐρυπυλος—which name for comparative purposes I transcribed with strict orthographic literalness as

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"Eurupulos", though by an unfortunate oversight the second *u* was copied out as *o*. Nor did I write that "Homer *commonly* gives, etc." I wrote "Homer *appears . . . in many other instances*, etc.", which is a very different thing. As Mr. Woolley finds it "difficult to parallel from Homer such Homeric usage", let me instance for him an apparent parallel of such usage in Homer's account of the slaying of the Trojan hero *Pēdasos*, where in the fourth succeeding line his associate is said to have "dwelt in *Pēdasos*".[1] Under the same initial letter, other instances of Homeric heroes bearing place-names appear to be *Petēos*[2] and *Pēdaios*,[3] with corresponding place-names *Petēon*[4] and *Pēdaion*.[5] And it was not an infrequent practice for the Hebrews in the Old Testament to call eponymic ancestors of the Syrio-Asia Minor people after their cities and lands.[6]

Confirmatory evidence for the association of the Homeric Eurupulos with Carchemish is possibly found in Homer's description of "the hero Eurupulos" as "the son of *Tēlephos*".[7] This Hellenized "Tēlephos" might postulate a Hitto-Sumerian original "Tilla-pa", wherein *pa* means "offspring"[8] and *Tilla* is the Sumerian equivalent of Ur, *Urartu* or "Armenia"[9] and *Amurru* or "Amor" or "Amorite";[10] and Carchemish was situated in the Amurru region according to the Assyrian and Egyptian records. And I find that Carchemish is also described *in the local Carchemish inscriptions* as being situated in Ur, Urartu, or Amurru, as is established with detailed proofs in my forthcoming work on the Hittite Inscriptions.

(c) *He assumes that the capital of the Ketei—Ḫatti would be Carchemish—which certainly was not the capital of the Ḫatti, an Anatolian power whose chief town was at Boghaz-keui.*

[1] *Iliad*, 6, 21 f. [2] *Iliad* 4, 338; 12, 355; 13, 690.
[3] *Id.*, 5, 69. [4] *Id.*, 2, 500. [5] *Id.*, 13, 172.
[6] See Genesis, ix, x. [7] *Odyssey*, 11, 519.
[8] See, for instance, Barton's *Babylonian Writing*, ii, 130, No. 249, 5.
[9] Cf. Prince, *Sumerian Lexicon*, 332, 351.
[10] Barton, *op. cit.* 165, No. 316.

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It is, indeed, lamentable to learn that an official excavator of the ruins of Carchemish should be ignorant of the elementary fact that Carchemish was for hundreds of years the chief capital of the Khatti (or as he spells their name in Semitic fashion Ḫatti) or Hittites after the fall of their imperial capital at Boghaz-keui. Even in Mr. Hall's excellent summary of Hittite history [1] we read: "*Carchemish, the capital of the southern Hittite kingdom*, that had come into existence at the break-up of the empire of Shubbiluliuma." Now this event, with the rise of Carchemish as the chief capital of the Khatti, is placed about 1200 B.C.,[2] which is before the epoch usually assigned to the Trojan War of Homer with its episode of "The Hero Eurupulos, chief of the Kētei" in the defence of Troy against the Achaian Greek invaders.

(*d*) *He assumes that the Seleucid Greeks, finding the name "Europulos" (which he has explained as Greek), could not understand it, and supposing the termination to be Assyrian, dropped it and "Grecianized" the word into "Europus" or "Oropus".*

What I did write was: "The original Hittite form of this Grecianized name 'Eurupulos' will doubtless be disclosed when the excavations at Carchemish are further advanced. As regards the formation of the later Greek name 'Oropus' or 'Europus', it seems conceivable that the later Seleucid Greeks, who are usually credited with having had the Assyrian priest Barosos in their employ, may have treated the latter part (*ulos*) of the name 'Eurupulos' as the common Assyrian affix of city-names, namely *alu* 'a city'. This would result in a reading of 'Eurup' for the city-name, and 'Eurup' would be Grecianized into 'Europus' or 'Oropus'." [The misspelling of *o* for *u* is herein rectified.] This suggestion seems to be expressed with sufficient clearness for ordinary comprehension, and is in itself a sufficient reply to Mr. Woolley's captious attempt to twist its meaning.

[1] H. R. Hall, *Ancient History of Near East*, 447.
[2] G. Garstang, *Land of the Hittites*, 391.

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Regarding the probable form of the original Hittite source of this Grecianized name "Eurupulos", I went on to suggest that "the immediate source of the Greek name *Oropus* and the modern Arabic *Jerabis*—the commoner modern local name for Carchemish—is, I think, the Akkado-Assyrian '*Arba*-ilu' or 'The divine *Arba*'. This latter city contained a famous shrine sacred to the goddess Ishtar, who bears the title of *Arba*; and I have observed some evidence indicating that '*Arba*-ilu' was Carchemish".

As *Arba* has the Sumerian equivalent of *Nin* or *Ninni*, a title of the Mother-goddess Ishtar, who bears also the variant of *Nina* and *Nana*, I recalled that Professor Sayce, in his note under reference, states that he finds in the local texts of Carchemish, that that city is called "the city of Nana or *Nina*";[1] and thus fully confirms the statement of Ammianus Marcellinus that Carchemish as "The Older Hierapolis" was known to the Romans also as "Ninus". I then suggested, for the reasons indicated in my note, that "the modern name for the lower channel of the Euphrates as 'Shatt-el-*Arab*' or 'Channel of *Arab*' appears to me to possibly preserve the tradition of *Arba* or 'Oropus', when it was a chief capital of the Seleucids and pre-Seleucids in Upper Mesopotamia"—especially as I had elsewhere shown[2] that the modern name of the other great waterway, the "Shatt-en-Nil", presumably preserved an old title of the city of Babylon.

On this Mr. Woolley sagely remarks: "Arba-ilu is Arbela [by which he presumably means the modern Arbēla or Irbil about 50 miles east of Mōṣul]. . . . As to the Shatt-el-Arab, I fail to see what it can have to do geographically or historically with Europus." If, however, Mr. Woolley re-reads my former note more carefully perhaps he may see what he "failed" to see before.

In confirmation of Carchemish having been presumably the

[1] *JRAS.*, 1921, 48.

[2] "Shinar and the Tower of Babel in the Babylonian Inscriptions" in *Asiatic Review*, April, 1922.

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great *Arba-ilu* of the Assyrian hymns and rituals, I may mention here that I have found in the local Carchemish inscriptions numerous references to that city as the especial shrine of the goddess Ishtar under the title of *Nin* or *Ninni*, with the Akkado-Assyrian equivalent of *Arba*. Ishtar elsewhere is called "Queen of the city Ninā";[1] and the Assyrian oracles during the Assyrian domination of Carchemish make that goddess repeatedly exclaim "I am Ishtar of Arba-ilu".[2] This "Arba-ilu" has hitherto been identified by Assyriologists with the modern Arbela or Irbil, to the east of Mōṣul, the ancient Nineveh—which latter city was also called "Ninus" by the Romans. No extensive remains of the Ishtar cult appear to have been found at this eastern Arbela; and its mere name does not necessarily identify it with the famous Arba-ilu of the rituals of the Spring festival, during the Assyrian domination of Carchemish. Place-names of sacred sites were often reduplicated. We have already seen the confusion between "The Older Hierapolis" of the Greeks at Carchemish with the later Hierapolis of the Seleucids at Membij. Besides these two cities called "Hierapolis", the Greeks had a third Hierapolis at Laodicea in Phrygia, and a fourth at Castabala,[3] north of Carchemish, in eastern Cilicia. Similarly, as regards "Europus", in addition to its application to Carchemish, there were two other Seleucid sacred cities bearing that name in Asia Minor and Babylonia, and another in Seleucis' birthplace in Macedonia.[4]

Thus the new evidence seems to indicate that the great "Arba-ilu" shrine was at Carchemish, or "The Older Hierapolis or Ninus" of the Greco-Romans; and that this Akkadian name, *Arba-ilu*, was probably the original source from which Homer coined his "Eurupulos" (or "Eurypylos"); and from which the later Greco-Romans coined respectively their "Hierapolis" and "Ōrōpos" or "Europus".

[1] S. Langdon, *Tammuz and Ishtar*, 48.
[2] *Id.*, 128 f.
[3] Bevan, *op. cit.*, ii, 151.
[4] Cf. *id.*, ii, 318.

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It will thus be seen, I think, that whatever defects may prove to be inherent in the suggestions put forward in my note under reference, those suggestions still stand untouched by anything contained in Mr. Woolley's captious desultory remarks.

L. A. WADDELL.

Editorial Note.—The discussion of this matter will not be continued.

THE SURROSH K. R. CAMA PRIZE

The K. R. Cama Oriental Institute (172 Sukhadwala Building, Hornby Road, Fort, Bombay) invites competitive essays for the Surrosh K. R. Cama Prize of the value of Rs. 225/- on the following subject :—

" A lucid and thoroughly intelligible translation in English of the 32nd, 33rd, and 34th chapters of the Yasna (the last three chapters of the Ahnuvaiti Gatha), in due accordance with grammar and philology, with notes and comments, wherever necessary, and with the substance of the whole at the end."

The essay should be designated by a motto and should be accompanied by a sealed cover containing the name of the competitor and his post office address, and should reach the Honorary Secretaries of the Institute on or before 5th July, 1923. The competition is open to all.

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NOTICES OF BOOKS

THE MUFAḌḌALĪYĀT. An anthology of Ancient Arabian Odes. Compiled by al-Mufaḍḍal, son of Muḥammad, according to the recension and with the commentary of Abū Muḥammad al-Anbārī. Edited for the first time with translation and notes by Sir CHARLES J. LYALL. Two volumes, 12 × 9, xxxviii + 892 and xxxi + 389 pp. Oxford: Clarendon Press, 1918–21.

It is only in deference to the wish expressed by the late Sir Charles Lyall that I have undertaken to write this notice of his last and most important work. To review it adequately would have been beyond my power in any case, but I had hoped, at least, to be able to read it through from beginning to end before attempting to give some account of it in the *Journal* of the Society with which he was so long and intimately connected. Other tasks, however, have come in the way, and in the circumstances a brief notice will not be considered inappropriate.

The collection, as its title indicates, was made by al-Mufaḍḍal of Ḍabbah (died *circa* A.H. 170), the most eminent of the Kúfah philologists in his day; according to one story it was compiled at the suggestion of the Caliph al-Manṣúr, to whose son, Muḥammad (al-Mahdí), al-Mufaḍḍal is said to have given instruction in literature. There seems to be little doubt that it has come down to us intact, having been transmitted by Ibn al-A'rábí, al-Mufaḍḍal's stepson, to Abú 'Ikrimah of Ḍabbah, from whom it passed to Abú Muḥammad al-Anbárí (died A.H. 304), whose commentary on it was afterwards published by his son, Abú Bakr, generally known as Ibn al-Anbárí (died A.H. 328). This is the standard recension; but another, by al-Marzúqí (died A.H. 421), is extant at Berlin and formed the basis of the unfinished edition by Thorbecke (1885), which contains the text alone of exactly one-third of the 126 pieces printed,

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together with al-Anbárí's commentary, in the first volume of the present edition. The selected odes (including many that reached the compiler in a fragmentary state) are chiefly pre-Islamic; no more than six of the sixty-seven authors were born after Islam was promulgated, while the great majority lived and died in paganism. The oldest pieces, those attributed to Muraqqish the Elder, must have been composed about A.D. 500. As Sir Charles points out, there is some evidence for, and none against, the view that these are genuine. His arguments in favour of the authenticity of the ancient poetry as a whole are set forth in a most lucid and effective manner, and can hardly fail to convince anyone whose mind is open to receive them.

Basing his text on two transcripts of a manuscript of al-Anbárí in the Sultan's Library in Cairo, itself the copy of an original in Constantinople, the editor also had at his disposal (1) portions of the same commentary preserved at Leipzig; (2) Thorbecke's copy of the Berlin MS. of al-Marzúqí's commentary; (3) two copies, lent by the Deutsche Morgenländische Gesellschaft and Yale University respectively, of another recension represented by a manuscript at Vienna; (4) Professor Wright's copy of a British Museum MS.; (5) the *Kitáb al-Ikhtiyárain*, purchased by the India Office from Mr. Krenkow, which contains twenty-three poems belonging to the *Mufaḍḍalíyát*. Al-Anbárí's commentary is of large extent and numerous verses are cited in it, so that critical and explanatory notes are often called for; these have been printed under the Arabic text. It need not be said that Sir Charles spared no pains to make the text perfect, and he acknowledges "the deepest obligations" to Professor Bevan and Professor Nöldeke for the help they gave him by reading the proofs throughout. Some difficulties, of course, remain unsolved, but it may be taken for granted that the number of avoidable errors is exceedingly small. The printing of the first volume, which began at Beyrout in 1910, under the care of the Jesuit Fathers, L. Cheikho and A. Salhani, was

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interrupted by the European War, with the result that although the English volume had gone through the press at Oxford by 1918, Sir Charles did not live to see the publication of either. He intended to publish, separately and later, "indexes of personal and place-names, of poetical quotations, and of selected words explained in the text." This indispensable supplement is now being prepared by Professor Bevan, and it could not possibly be in better hands.

The anthology of al-Mufaḍḍal is not a collection of masterpieces, like the *Mu'allaqát*, or of choice excerpts, like the *Ḥamâsah*. It stands on a lower level of excellence—some of the odes seem to have been selected on account of their interest to philologists—but on the other hand, its contents exhibit the general features of Bedouin verse more truly and in greater variety. The translation is as admirable as would be expected by all who know the author's skill in this art. Most of the poems have been rendered into prose. Amongst the metrical versions (in which Sir Charles again follows the methods so successfully adopted by him, with certain modifications, from Friedrich Rückert) attention may be called to the splendidly vivid poem by Ta'abbaṭa Sharrà (No. I), the beautiful prelude to No. XX (ash-Shanfarà), the bard's lament for his lost youth (No. XLIV: al-Aswad, son of Ya'fur), Mutammim's elegy on his brother Málik (No. LXVII), and the famous odes of 'Alqamah (No. CXIX) and Abú Dhu'aib (No. CXXVI). The English commentary includes biographical and historical introductions to each piece, ample notes on points of language, interpretation, prosody, genealogy, folk-lore, botany, etc., and illustrates the details of old Arabian life in a way that has never been surpassed. The whole volume, in short, displays the peculiar gifts which made Lyall such a great interpreter and translator, combined with an erudition worthy of the two French scholars, Silvestre de Sacy and Caussin de Perceval, to whose memory it is dedicated. There is a valuable index of subjects as well as one of proper names.

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I may conclude with a few suggestions :—

X 21. The editor takes أَطَاعَ as equivalent to طَوَّعَ, adding that the lexx. do not mention this sense. I think the ordinary meaning will serve. Translate : "(A ship) whose quick-travelling sail is obeyed (i.e. not opposed) by the wind." The sail has a following wind, not a contrary one.

XI 6. فرأيتُ أنّ الحُكْمَ مُجْتَنِبُ الصِّبا. The use of *ḥukm* in the sense of wisdom is unusual, as the editor remarks ; but more extraordinary is the use of *ḥukm* in this context at all. We should expect الحِلْمَ. *Ḥilm* is specially contrasted with *jahl* (Goldziher, *Muḥamm. Stud.*, i, 222 foll.) and with *ṣibá*, which is a species of *jahl* (الصبوة جهلة الفتوّة, *Lisán*, xix, 181[3]) : cf. *Mufaḍḍ.* xxi[1], فصبا وليس لمن صبا حِلْمُ ; *ibid.* xlii[1] ; Zuhair, *Díwáns*, 192 penult. ; *et passim*. I should be inclined to substitute الحلم for الحكم. The latter word, though supported by the gloss, seems barely possible in such a quasi-proverbial phrase as we have here.

CXIX. The statement (vol. ii, p. 328) that Mundhir, son of Má'as-Samá, was killed in the battle of 'Ain Ubágh is rejected by Guidi (*L'Arabie antéislamique*, p. 22), on what authority does not appear.

CXXIII 14. For مُرّ الحقِّ cf. *al-Fakhrí*, ed. Derenbourg, p. 125, l. 2.

R. A. N.

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GRAMMAR OF COLLOQUIAL TIBETAN (crown octavo, viii + 224 pp.) and ENGLISH-TIBETAN COLLOQUIAL DICTIONARY (crown octavo, xxxvi + 562 pp.). By C. A. BELL, C.M.G., C.I.E. Calcutta: The Bengal Secretariat Book Depôt. 1920.

In the above two volumes Sir C. A. Bell has published a revised and extended edition of his former *Manual of Colloquial Tibetan*, published in 1905. The fact that the former manual has been sold out and a new edition was required shows the value of Sir C. A. Bell's former work, which is now further increased by the additional matter of the present two volumes.

Sir C. A. Bell is particularly well fitted to write on colloquial Tibetan, for, as he mentions in his preface, he was, as Political Officer in Sikkim, for many years in charge of the diplomatic relations of the British Government with Tibet and Bhutân, and was brought in contact with Tibetans of all classes.

The amount of matter that has been added is shown by the fact that the grammar portion of the former manual has increased from 153 to 224 pages, and the vocabulary from 298 to 562 pages. The additions to the grammar are chiefly under the head of the verb and the conversational exercises. The portion of the grammar dealing with the pronunciation has also been printed as an introduction at the beginning of the dictionary, so that the latter can be used by itself. This introduction should be carefully read, so as to supplement the phonetic spelling of the Tibetan words, given in the Roman character. As Sir C. A. Bell observes, it is not possible to represent all the Tibetan sounds by Roman letters with exactitude. Consequently, though the phonetic spelling adopted gives the correct pronunciation in many cases, in many others it is only approximate. One or two general examples will show this. The indefinite article གཅིག་ "a", "an" is written as *chi*, and the definite article ཀྱི་

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"the" as *di*, but the vowel *i* has quite a different sound in these two words. In the first the final *g*, though almost, is *not quite* silent, and the sound would be *chi*^{k}. Again, བསད་པ་ "to kill" and ཤེས་པ "to know" are spelt *sé-pa* and *she-pa* respectively, though the sound represented by the *e* is entirely different in the two cases, being short and abrupt in the former and long in the latter. The grammar and dictionary are of the dialect of Central Tibet. Although there are various dialects in outlying parts of the country, the Central Tibetan dialect is understood throughout the country and may be said to be the *lingua franca* of Tibet, and the standard form of the language. Its difference from the dialects is chiefly in the pronunciation. The grammar gives all the forms of the verb which are in current use, with perhaps one exception. I have both found in current written Tibetan, and also frequently heard in speech the form རྒྱུ *rgyu* for the future tense, e.g. *bglug-rgyu-yin*, "I, or we, will pour," for which Sir C. A. Bell gives only *bglug-gi-yin*. Although uneducated persons may use *gi* for the future as for the present tense, educated Tibetans in many cases speak as well as write *rgyu* for the future.

It will be noticed that a number of the forms in use in literature are not used at all in current speech. We could wish that the grammar had dealt more fully with the question of tones in Tibetan, which are mentioned in paragraphs 28 and 29. Sir C. A. Bell observes that "for practical purposes we must discriminate between three tones, the high, the medium, and the low. The initial letter and the prefix" [to which should be added also a superscribed letter] "govern the tone". The Rev. E. Amundsen [1] has dealt the most fully, so far, with the tones in Tibetan. As he notes, the Tibetans consider that there are six tones: (1) high tone, abrupt; (2) high tone, long; (3) medium, abrupt; (4)

[1] *Primer of Standard Tibetan*, by E. Amundsen—the Scandinavian All. Mission Press, Ghoom, Darjeeling (about 1900).

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medium, long; (5) low, abrupt (low and rising); and (6) low, long, descending.[1]

As Sir G. A. Grierson has pointed out,[2] a pitch may be high or low, but cannot be long or short, and hence it is wrong to talk of a prolonged tone. On this basis the number of tones in Tibetan would be four, Nos. 5 and 6 being separate tones. In a future edition of the dictionary it would be useful if the tone of the word could be indicated on the notation proposed by Sir George Grierson.[3]

All students of Colloquial Tibetan are greatly indebted to Sir C. A. Bell for this enlarged edition of his Colloquial Grammar and Dictionary.

E. H. C. WALSH.

THE ORIGIN OF THE CRUCIFORM PLAN OF CAIRENE MADRASAHS. By K. A. C. CRESWELL. pp. 54, 10 figures, xii plates. Extrait du Bulletin de l'Institut français d'archéologie orientale, t. xxi. Cairo, 1922.

Hitherto the commonly accepted belief has been that the cruciform plan for a madrasah or collegiate mosque originated in Syria or perhaps further to the eastward, somewhere in the Saljûq empire. Mr. Creswell, after a very full discussion of what seems to be the whole of the evidence available, arrives at the conclusion that the plan is an Egyptian invention.

Mr. Creswell's arguments are convincing, and he tells us that the late Monsieur Max Van Berchem (who originally threw out the conjecture which is the basis of the current belief), after seeing the evidence collected by him and discussing the matter with him, expressed himself converted to his theory. In accepting it, however, it will perhaps be safer to make some reservation as to our almost complete want

[1] See also *Linguistic Survey of India*, vol. iii, pt. i.

[2] "Tones in Oriental Languages," by Sir George Grierson (*JRAS.* 1920, pp. 447 ff., 458).

[3] Ibid.

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of knowledge of the plans of early Mesopotamian and Persian mosques.

The work includes a description of the eight existing Syrian madrasahs which were founded before the last quarter of the thirteenth century, and plans of seven of them, besides illustrations—a valuable supply of new material, for it appears that only a short account and an imperfect plan of one of these mosques have been published before. It represents a substantial contribution to the history of Muhammadan art, all the more acceptable as the tendency recently has been to minimize the share of Egypt in art development under Islam.

A. R. GUEST.

REVISED TRANSLATION OF THE CHAHAR MAQALA OF NIZAMI-I-'ARUDI. By EDWARD G. BROWNE. $9\frac{3}{4} \times 6\frac{1}{4}$, XV + 184 pp. Gibb Memorial. Cambridge University Press, 1921.

Ahmad ibn 'Umar ibn 'Ali of Samarcand, better known by his title of Nizami, the Prosodist, flourished in the twelfth century of the Christian era. His great work, termed Chahar Maqala or the "Four Discourses" on secretaries, poets, astrologers, and physicians, gives a vivid and accurate bird's-eye view of Persia, Afghanistan, and Central Asia, and of the leading figures of the period. Professor Browne first edited this classic in 1899, and we now have to thank him for a second and improved edition with valuable notes on many subjects.

It is difficult to know what to notice, there is so much that excites our interest. We have the oldest account of Firdawsi, of how he wrote his famous epic that stands alone in Western Asia, as that of Homer did in Hellas, and of Mahmud's lack of liberality. Finally we have the dramatic scene, when the repentant monarch dispatched a rich reward on the royal camels, which entered Tus by the Rudbar gate, as the corpse of Firdawsi was being carried off to burial. The birthplace of

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Firdawsi at Bazh, the site of Tabaran, of Rudbar, and of Razan, which are referred to in the anecdote, have now all been identified (*vide* my "Historical Notes on Khurasan", *JRAS.*, October, 1910). Again, we have the reference to the Astronomer-poet of Nishapur, and we realize how deeply Umar Khayyam impressed his contemporaries, not, indeed, as a poet, but as an astrologer.

Perhaps one of the most typical verses quoted is that of the poet Muzzi, who, having been rewarded for a notable quatrain by the gift of a horse, immediately expressed his thanks :—

The King beheld the *Fire* which in me blazed;
Me from low *Earth* above the Moon he raised;
From me a verse, like *Water* fluent heard,
And swift as *Wind* a noble steed conferred.

This brilliant impromptu, which refers to the four elements, is an excellent example of this class of Persian poetry.

Thanks to Nizami, we gain a keen insight into the character of Mahmud, the famous "Idol-breaker". He must have been difficult to live with, for he said of himself, "Kings are like little children, in order to receive rewards from them, one should speak in accordance with their views." Mahmud certainly acted up to the above as anecdotes prove.

In conclusion, the text is just under one hundred pages, and in no other work is so much to be found in so few pages, and not only the scholar but the historian will gain much by studying what is held to be the most perfect example of Persian prose.

P. M. Sykes.

Memoirs of Zehir-ed-din Muhammed Babur, Emperor of Hindustan. Translated by John Leyden and William Erskine. Annotated and revised by Sir Lucas King. Two volumes, $7\frac{1}{4} \times 5$, pp. cxi + 471, 1 portrait, 1 map. Humphrey Milford : Oxford University Press, 1921.

These two small octavo volumes, neatly got up and closely printed, contain an amended reprint of Erskine's edition of

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Babur's *Memoirs*, two prefaces (by Sir Lucas King and Erskine), Erskine's introduction and supplementary remarks, five appendices, and an index of 22 pages. The book is, in fact, Erskine's edition of 1826 brought up to date by a thoroughly competent scholar, and thus most welcome. Of the three parts into which it is divided I hardly like to say which is the most interesting and illuminating: Babur's self-revealing text, the fine introduction, which is highly instructive reading even for the expert Orientalist, although a hundred years old, or the appendices. To all of them Sir Lucas King has added a running commentary in footnotes, distinguished from Erskine's by square brackets, which are remarkable for the self-restraint and mature scholarship exhibited.

This account of Babur, the Mughal "tiger", coming on the heels of Professor Qanungo's recent researches into the story of Sher Shah Sūr, the Afghan "tiger" of much the same time, is of supreme interest to those who would know what manner of men they were that founded Muhammadan Empires at Delhi and Agra in the sixteenth century. Sher Shah's was destined to disappear after a short while, but Babur's lasted on for two and a half centuries. Alike in many respects and both possessed of supreme military and administrative capacity, the manner of their coming by their title of "tiger" rather shows the difference between them. Babur inherited his, for he was not the first Babur of his line in the days before he thought of India: Sher Shah had his conferred upon him on account of the character he bore among his contemporaries, which they compared to that of the Royal not the savage tiger. Babur was a typical prince of his day and race, though of much more than ordinary intellectual power, which is saying much for him: Sher Shah raised himself by sheer force of intellect and character from the position of the eldest son of a country gentleman (*jāgīrdār*) to that of Emperor of Hindostan. In this sense he was the superior man of the two, though this must not be understood as any belittling of the achievements of Babur.

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It is impossible to do more than skim over so full a book as this in the space at my disposal, so I will merely touch on a point or two to indicate its extreme interest to those who study Oriental history. In Erskine's introduction there is a good deal about Tamerlane (i.e. limping Taimur or Tīmūr, according as one affects the Indian or Persian pronunciation), from whom Babur was directly descended. Going on the information as to this really great man that was available to Europeans a century ago, Erskine gives what is to my mind an inadequate idea of him, and Sir Lucas King does not apparently "correct" him. Two incompatible views of Tīmūr have come down to us: one by an enemy and one by a friend. It was the enemy's that first found its way to the world of European scholarship. To the enemy and traducer he was everything that was low and vile: to the friend and admirer everything that was the reverse. I may be wrong in my own estimate of this important man, but very briefly it is this. He was by descent the military head of the Barlās or Birlās tribe of Mongols in Samarkand, but was brought up in an atmosphere of scholarly Arab Muhammadanism in which his father and grandfather delighted, being by personal inclination peaceable, highly read antiquaries. So what Tīmūr inherited from his general Mongol ancestry was military capacity, and what he acquired from his immediate forebears was a cultivated taste and a habit of reading, which were engrained in him. He was anything but an unlettered savage leader, though he showed the ancestral ferocity on occasion. So, indeed, did both Babur and Sher Shah, owing to inherited characteristics. The four days' sack of Delhi by his followers (1398), which he did not try to check, was horrible, but he had the grace to devote several pages of excuses for it in his *Institutes* or *Memoirs*, which, as I think, he wrote himself. Indeed, the time has come for an amended and fully up-to-date edition of Davy's translation (1783) of the *Tūzukāt-i-Tīmūrī*, and no one could do it better than Sir Lucas King.

There are other items in the introduction on which I am

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tempted to dilate, but I must pass on to the text itself. Every great man's actions spring from three sources: his intellect, his character, and his environment. His intellect governs his conscious actions; his character governs his natural, i.e. unconscious or at best subconscious, actions; his environment, including his heredity, largely colours both. There is perpetual war between his intellect and his character, each endeavouring to control the other, and in this war his environment is always intervening. So that when a man is trying to use his intellect only, his character colours the resultant action, and vice versa his intellect is at play even in his more unconscious actions; and in both cases he never quite gets over the pressure of his environment. Thus the same man may be a great administrator, a profound thinker, a fine scholar, and yet what is universally recognized as "a human being" in his every-day actions, and a prey to temptations of a certain kind—it may be, indeed, of every kind—i.e. unable to resist the promptings of his unconscious or subconscious mind—unable to escape from his surroundings and early education. In this way a far-thinking philosopher may be as weak as water and hide-bound by custom in daily life, while an intellectual dolt may be strong of will, and able to perform the difficult feat of breaking through custom. One can get at the situation thus brought about by considering the phenomenon of moral and physical courage. In every man's life there is a perpetual struggle between these "qualities", with the result that no man is either wholly a moral or a physical coward or hero.

All this is well illustrated in the outspoken pages of Babur's memoirs of his own life, and it is this that makes them so well worth study, irrespective of the greatness and importance of his personal achievements. It is all there:—the intellect that made him capable of planning and carrying through his many campaigns, great and small; that enabled him to be the first in his regions to utilize on a decisive scale the then novel idea of modern artillery; that made him set about

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regulating the administration whenever he got possession of a city or province; that caused him to apportion of care aforethought praise and blame; that caused him to be an accurate student of the geography of the countries within his ken—as, indeed, every successful general must be; that made him appreciate the difficulties of any given position at their true worth.—The character that made him drink and take drugs to excess; take a pride in recording his ancestry and their doings, for which, however, we of the centuries after him must be thankful; minutely observe the people about him and record his observations, for which mirror of the society of his day our heartfelt thanks; that gave him his love of nature and natural history; that produced his infatuation for his son, Humāyūn.—The environment that made him an unlimited polygamist and governed his attitude towards women and his appraisement of them in the abstract; that caused him to act as a ferocious tyrant when he thought it politic, taking political action to be the result of the conquest of environment over character, when intellect has become the handmaid of character—the conscious mind the handmaid of the subconscious. It was unconscious subservience to environment that made him capable of such a comment as this: "Many young cavaliers of his party were taken prisoners. Sultan Hussain Mirza ordered the whole of them to have their heads struck off. Nor in this instance alone: on every occasion when any of his sons rebelled and was defeated, he uniformly ordered every one of his adherents who fell into his hands to be beheaded. And why not? He had right on his side."

So much for environment affecting a view of political action. Now for a traditional view of an act of treachery (*nimakharāmī*): "For the sake of this fleeting world, which never was and never will be true to anyone, this thankless and ungrateful man [Khusru Shah] seized Sultan Masa'ūd Mirza, a prince whom he himself had reared from infancy to manhood, and whose governor [tutor on behalf of his father,

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his own patron] he had been, and blinded him by lancing his eyes. . . . Every day till the day of judgment, may a hundred curses light on the head of that man, who is guilty of such blank treachery, and on his who plans it." Elsewhere Babur also hurls invectives at Khusru Shah, of whom he says in his own inimitable fashion that "he had not the courage to face a barn-door fowl."

Babur's general attitude towards women was wholly that of his race and time, i.e. it was dictated by custom and environment. Writing of his own sisters and other near relatives, he records again and again, as a matter of ordinary fact that, in consequence of political events in his turbulent day, so and so "fell into the hands of" such and such a prince or even marauder, and by him had children, whose careers he records. These misfortunes had no effect on their social status. Sometimes there was a much worse fate in store, e.g. "In the prisons of that wicked miscreant they [the captured women] departed from this perishable world."

His marriages were strictly in accordance with custom, and he made no attempt to escape from his environment in this respect. His first wife was Aesha Sultan Begam, his cousin, to whom he was betrothed at 5 and married at 16. She was the mother of his short-lived first child, born when he was 19; but he soon tired of her, and she finally "left my family". Subsequently "he saw" her half-sister, "and being pleased with her," married her by the usual procedure. At the instance of his mother he married yet another cousin: "We did not agree very well," and after a while this poor lady died of smallpox. Of one of his father's wives, he remarks: "A year or a year and a half after the marriage she was removed from the *haram*." One wonders what sort of family tragedy this bald statement covers. Of another lady we read that she acquired such influence over her husband that he could not look at another woman, and so she was put out of the way. Of a near relative, however, who, too, had married a first cousin, it is recorded that "he had no other wife or concubine".

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In his frank, outspoken way Babur also tells the world of his shyness and bashfulness when he first married Aesha Sultan Begam, but he records this fact in terms less strong than those used in the unsavoury story of the boy, Bāburī. That story is told with evident confidence as to its being understood as a natural and not unusual expression of feelings by his contemporaries. On the other hand, Babur was capable, when he applied his intellect, of gauging the mental capacities of women: "There were few of her sex who equalled my grandmother, Āhsān Doulat Begam, in sense and sagacity. She was uncommonly far-sighted and judicious. Many affairs and enterprises of importance were conducted by her advice." One can see the whole story. In Babur's attitude towards women, environment took charge of the situation and controlled his character, while his intellect played the part of a subservient handmaiden.

Babur's intellectual estimates of the men around him and of his own family are penetrating in a high degree, and are expressed with an astonishing picturesqueness. They form, indeed, a criterion of his intellectual powers, and perhaps in no way is his character more clearly shown than in the use he made of those through whom he most clearly saw. Thus, of Kambar 'Ali Salākh, a Mughal officer who had risen from quite the lowest ranks of life, he remarks: "From me he received distinguished favours. Till he had attained high rank, his conduct was exceedingly good, but after he had gained a certain elevation he became negligent and perverse. He talked a great deal and very idly; indeed, there can be no doubt that a great talker must talk foolishly. He was a man of contracted capacity and of a muddy brain." He is often mentioned, and Babur's mode of using such a man is a lesson in both politics and administration.

Babur founded the Indian Mughal Empire, and the Mughals were his mainstay, but characteristically he never liked them. It was always his Tūrkī connexion that he was so proud of. Witness the quatrain he quotes with evident gusto of "the wretches of Mughals":—

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If the Mughal race were a race of angels, it is a bad race;
And were the name Mughal written in gold, it would be odious.
Take care not to pluck one ear of corn from a Mughal's harvest;
The Mughal seed is such that whatever is sowed with it is execrable.

In the above lines and the circumstances in which they are quoted Babur shows himself to be "a man", i.e. his character has command of his intellect. It constantly has in these breezy memoirs, e.g. in the wonderful story he tells of the powers of the Mughal *yākshi*, or surgeon, who "cured" him of the severe wound he received on the banks of the Khākān in 1503, and his reasons for having "no doubt that Khwāja Maulāna Qāzī was a Walī (Saint)": "What better proof of it could be required than the single fact that in a short time no trace or memorial remained of any one of all those who were concerned in his murder?" Here character as subconscious intelligence, and not intellect as conscious intelligence, is arguing.

Observing that this book is a mass of delightful tit-bits of observation and self-revelation I must cease from quoting it further, and close my remarks with one or two as to the admirable notes of its latest editor. I would first call attention to the notes on geographical identifications and to such comments as those on the Uighurs, p. xxiii; on the Mongol language, p. li; on the term Turkoman, p. lxviii; on the Huns, p. xlix; on the introduction of modern artillery, p. 58. On the last point I would remark that Sher Shah deliberately, and with admirable judgment as the sequel showed, did not follow Babur as to the use of artillery with such armies as he was first able to raise, because the then new-fangled arm would have prevented the rapid secret marches through mountain jungles he was obliged to make, showing here as much genius in eschewing artillery as Babur did in using it.

There are many of such important notes scattered through

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the two volumes; but surely Sir Lucas King must be tripping, if his note on p. 80 is to be read as supporting Erskine's error that the carved "Mosque" at Samarkand mentioned by Babur in 1497 is modelled on Sher Shah's mosque at Delhi. Sher Shah did not get to Delhi as a ruler before 1539 in the days of Babur's son and his opponent, Humāyūn the Unready. In fact, the Qila'-Kohna or Sher Shah's Masjid in the Purāna Qila' at Delhi seems to have been built in 1541.

Lastly, if any reader of Babur's *Memoirs* should be inclined to judge that this mighty man of the past was after all not a very great personage, let him consider whether the stories of other such heroes have come down to us with a hundredth part of the candour or fullness of revelation as to character as is to be found in his engrossing pages.

R. C. TEMPLE.

ANCIENT INDIAN HISTORICAL TRADITION. By F. E. PARGITER. $9\frac{1}{4} \times 5\frac{3}{4}$, viii + 368 pp. London: Oxford University Press, 1922.

The *Purānas* and the Brahmanical literature formed thereon naturally attracted the attention of the earlier English inquirers into "Things Indian", leading to the historical school of Wilford and his time. Their lucubrations were, however, premature and soon brought them into ridicule, when true scholarship began to tackle the vast historical subject that Sanskrit MSS. revealed. They were, as it were necessarily, followed by the better, but still imperfectly, equipped schools of the "higher criticism". This led to the equally erroneous, as it has turned out, beliefs that no real history is contained in Hindu literature and that no acceptable chronological statements can be found between the days of Aśoka and the Muhammadan irruptions—a period of some thirteen centuries. The advance made in the deciphering of epigraphic documents and in the solution of Indian epigraphic chronological statements next led, and still erroneously, to the belief that scholarship in India itself must rely entirely on epigraphic

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records for Indian chronology, and this belief was confirmed by the gradual filling up in this way of the gaps in ascertained dates for nearly the whole period desired.

As one who has taken a leading part in the publication of the labours of the Indian epigraphists I suppose I ought to support their pretensions, but all through the half century that has elapsed since Fleet and his fellow workers commenced to perfect their line of study and research I have felt that literature such as that contained in the *Purānas* would in the end be found to include true history in its statements. It is, therefore, with real pleasure that I have perused the results of Mr. Pargiter's scholarly and level-headed labours of the last thirty years, though it must be admitted that they are startling and revolutionary.

The space at my disposal in this *Journal* does not permit of my making any but the most cursory remarks on his work. Speaking in the briefest manner possible, it appears to me that he has applied to his subject a profound scholarship and treated the evidence it has brought before him with the minuteness and patience that his training as a High Court Judge must have made habitual to him. It need hardly be said that it is marshalled with the skill and fairness of an experienced lawyer.

Mr. Pargiter's great point is that the *Purānas*, divested of Brahmanical religious padding, and what is more important, of their sectarian clothing, are historical records of the Kshattriyas, i.e. of active men of the world, and therefore contain real history which is capable of being dug out of them.

Tradition of every kind dies hard, and in a well-known book published so lately as 1914—Professor Rapson's *Ancient India*—one finds the writer following the tradition established by modern European scholarship and regarding the *Purānas* and the like as purely Brahmanical books of no historical value whatever, leaving it to epigraphy and the works of foreign contemporary writers to supply what true historical data are obtainable about ancient India. But he does express

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a hope that some day a scholar will be found who can separate the Brahmanic dross from the old literature and thus bring out the history that is buried in it. Such a scholar has arisen in Mr. Pargiter, and owing to the impetus that will be given by his book, which bids fair to become a classic on its own account, we have a chance of developing history from Indian literature, a line of thought that is taking root everywhere in the minds of Indian scholars.

I cannot go further here into this important work than to point out the revolutionary nature of the main historical inference drawn by Mr. Pargiter. This is that Indian tradition does not support the now long-accepted theory that the "Aryans" entered by the north-west frontier and spread thence over North India and the Deccan, and finally from the religious point of view dominated all India. But on the contrary, it supports the view that the Aryans entered India by the Mid-Himalayas and penetrated as far south as Allahabad, and then by a reflex movement spread northwards into Iran or Persia and North Mesopotamia (Mitanni). If this very brief summary does Mr. Pargiter injustice I tender him my apologies. But my point is that if he is right—and his book is such that it cannot lightly be set aside—we must reconstruct all our ideas of "Aryan" migrations to India, Persia, and Europe, and one's experience of such reconstructions is that they do not take effect until a novel theory has been subjected to every kind of criticism—friendly and hostile.

R. C. TEMPLE.

FISHING FROM THE EARLIEST TIMES. By WILLIAM RADCLIFFE, Esq., sometime of Balliol College, Oxford. 8vo, 478 pp., with numerous illustrations. London: John Murray, 1921.

We have here a very readable and highly entertaining book by an English country gentleman of the old school, a veritable Martial of our times. The author's object is to describe the

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craft of the fisherman in ancient times, from the old Stone Age to A.D. 500. Done in the best of English style, savoured with classical learning, witty and full of culture, it has strong claims to attaining the reputation of Isaak Walton's *The Compleat Angler*. The Introduction is devoted to fishing and fishing tackle in the Palæolithic Period, the cave dwellers of Europe, the Aztecs of Mexico, and the ancient Peruvians; the Eskimos and various lower races of our time are all thoroughly examined with respect to fishing. He concludes that "Only two weapons can be traceably attributed to Palæolithic man. First and pre-eminent the spear (or harpon, with its various congeners), with possibly adjustable flint heads, and second, but to a far less extent, the gorge, or as it has been better termed, the bait-holder." Fishing with hook and line is not a primitive contrivance and the use of the net is doubtful in the old Stone Age. In his remarks on certain Aztec pictographs, pp. 22–3, which obviously refer to boating and fishing, the author interprets probably after standard writers on the subject, certain dots and ovals to indicate the age of boys and their allowance of cakes. My own experience with pictographic writing excites a feeling of caution regarding these conjectures and many others which have been made concerning the Mendoza Codex of Aztec signs.

The subject of Greek and Roman fishing occupies the first and greater portion of the book. The civilization of Greece and Rome is Mr. Radcliffe's specialty. He required little help and guidance from specialists here, and his chapters on this department are admirably illustrated with quotations of classical writers; especially does he lay Homer, Plato, Aristotle, Theocritus, Pliny, Vergil, and Martial under contribution. Obscure writers of all periods even down to the Middle Ages and the recently recovered Greek papyri are utilized. The statements of the text are extremely well defended by documents and citations. Fishing with spear, net, line, and rod were already familiar to the Greeks in Homer's time, but to Aristotle belongs the credit of founding the science

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of piscatorial zoology. He first determined the age of certain fish by scale reading, and Mr. Radcliffe claims to be the first historian to vindicate the distinction for Aristotle. There is an important digression on pp. 169-72, concerning Plutarch, who has been hitherto accused of "speaking against fishing as a base, illiberal employment, having neither wit nor perspicacity in it, nor worth the labour". For centuries Plutarch had been libelled as a contemner of fishing, but our author shows that it is all a stupid blunder. The words were written by Plutarch, but occur in a debate and were said by Aristotimus, who advocates the superior sagacity of terrestrial animals as against the aquatics. The false accusation against an ancient writer so well known and meritorious as Plutarch is easily dispelled, and the point will certainly secure for our author unstinted praise. Space forbids but scant notice of these delightful and learned chapters on fish and fishing among the Greeks and Romans, nor can I devote more than passing reference to the exhaustive chapters on Egyptian fishing. For Egypt is claimed the invention of the hook and, above all, the rod and the reel.

The chapters on Assyrian fishing represent the first attempt to investigate this aspect of Sumero-Babylonian-Assyrian culture. The Sumerians, from whom the civilization of ancient Mesopotamia was principally derived, fished only with net and spear; the Assyrians, at any rate, knew the hook and line, but their use in ancient Sumer is doubtful. The rod seems to have been unknown in Babylonia and Assyria, as it was among the Hebrews, an extraordinary fact in view of their long and intimate contact with Egypt. The arrival of the Semites in Mesopotamia is placed at 3800 B.C., but the author should revise his date here. Semitic kings are known to have ruled in the northern kingdom of Kish as early as 5000 B.C. See my article in the *Journal of Egyptian Archæology*, October, 1921, "The Early Chronology of Sumer and Egypt." As to the relations of the Sumerians with pre-historic Egypt, the statements on p. 352 now require drastic revision.

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Sumerian culture and writing existed in Egypt long before the advent of the true Egyptians, and archæological evidence of their presence there is abundant. It is a real pleasure to the specialist to see how carefully Mr. Radcliffe utilizes scientific work and makes every effort to understand problems which he approached as *terra nova* to himself. The chapter on the fish gods of Babylonia is cautious and moves the Assyriologist to question his own knowledge of the subject. It is certainly curious that the Sumero-Babylonian pantheon possessed no special deity of fishdom. The nearest approach thereto is certainly the old Sumerian aspect of the mother goddess Ninā, whose name means "Queen of the Waters", and the pictograph for her name means "fish-house". See my *Tammuz and Ishtar*, p. 45, but she is essentially a patroness of irrigation and pastures. She was by origin most certainly a patroness of water crustacea and fish, and was later identified with the western ? (Hittite ?) *Išhara*, the scorpion deity. *Išhara*, the secondary name of Ninā, is possibly derived from *eš-ḫa*, "fish-house," see ibid. 46 f., but it is curious that she is constantly identified with Scorpio in astronomy and not with Pisces.[1] As she was by origin a fish deity but in actual worship a patroness of canals, springs, and rivers, the inference is that the piscatorial craft was despised in Babylonia as it was in Egypt and Greece. Scheil, in his note "Sur le Marché aux Poissons de Larsa", *Revue d'Assyriologie*, 15, 183, comments upon the remarkable decline in the demand for fish in Sumer and Accad. In early Sumerian times economic documents contain numerous references to fish in offering and in commerce. But fish as a diet certainly declined in Babylonia, which probably accounts for the transformation of the character of Ninā. An old Sumerian hymn to Ninā actually describes her as patroness of fish, *PSBA.* 1918, 83, cited by the author and another, *Revue d'Assyriologie*, 15, 128, published by Scheil, again connects her with various fish.

She is, at any rate in the early period before the decline of

[1] See *JEA.* vi, 196, n. 3.

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fish-eating, a fish goddess. But undoubtedly the Sumerian deity most commonly associated with fish was Enki or Ea of Eridu. He was identified with the constellation Pisces, see Kugler, *Sternkunde Ergänzung*, 65, 19, and to his regime in the heavens belonged Aquarius or in legend the fish-man (*kulilu*), and especially Capricorn, usually called *suḫurmaš*, the goat-fish, or *kusarikku*, fish-antelope, or *alluttu*. This god of water was usually symbolized on monuments by the goat-fish, a goat or an antelope with a fish-body. The best example is found on the kudurru of Melišipak, *Delegation en Perse*, i, pl. xvi. That he was actually associated with both goat-fish and fish-man was proven by Heuzey in *Revue d'Assyrologie*, v, 131, from a seal which shows the water-god standing on both of these fabulous beings, who are also figured above him. He holds the overflowing jar from which two streams, the Tigris and Euphrates, descend. His association with the antelope or goat probably arose after he was identified with Capricorn, and the widely spread symbol of the goat-fish or antelope-fish is due to his double association with Capricorn and Pisces. The figure of a being with body of a fish and head of a bearded man on the monuments and seals usually represents Ea of Eridu, but sometimes simply Aquarius as one of the primeval monsters of chaos, who were bound and chained to the stars by Marduk. See especially the conflict of Marduk with the fish-man (*ġa-galu*, *ġa-lù*, *ġa-lù-lù* = *kulilu*) in Ward, *Seal Cylinders of Western Asia*, No. 657. The fish-man (*kulilu*) appears frequently in the epic of Creation among the monsters of the dragon of chaos, Tiamat. Senecherib honoured Ea by offerings of *balgû* and *šêlibbu* fish, Meissner-Rost, *Bauinscriften Senecheribs*, 76, 18, and by dedicating to him a boat of gold, a golden fish, and a golden goat-fish (*alluttu*),[1] III R. 12, No. 2, 34.

[1] For *alluttu* = *suḫurmašu* = capricorn, see Weidner, *Handbuch der Babylonischen Astronomie*, 66, 10; 67, 31. The Babylonians saw in Capricorn not only the figure of a goat, but alpha + beta of this constellation was also called the kakkab *ma-gur* or boat-star and assigned to Ea.

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Therefore Ea or Oannes was primarily the fish-deity of Babylonia, god of wisdom, the creative word who evolved the form of all things, and to his priests of incantation he delegated mystic wisdom and power over the demons. For this reason his priests clothed themselves in robes to imitate fish, symbol of the divine and mystic wisdom of the water-god. On monuments of Nineveh there is a curious genius from whose head falls a robe in imitation of a fish. He appears to be in the act of fertilizing the sacred date-palm, see Radcliffe, p. 365, and Layard, *Nineveh and Babylon*, p. 343. This figure is certainly not Dagan, but an inferior water-deity of the cult of Eridu. The figure has been commonly taken for Dagan of Ashdod, whose cult in Babylonia is said to be a western importation. His cult appears in Babylonia in the age of Sargon and Narām-Sin of the twenty-ninth and twenty-eighth centuries, and he seems to have been worshipped at Maer, a Semitic centre on the middle Euphrates, from ancient times. He certainly does not belong to the Sumerian pantheon, except by adoption, and there is no evidence at all for his fish-character in Babylonia. There is every reason to believe that Dagan is really a very ancient Amorite deity, but there is no evidence for seeing Dagan in the fish-genii of the monuments of Nineveh. The figures designated as Dagan in chapter 33 almost certainly represent a minor deity of the great water cult of Eridu.

A study of Jewish and Chinese fishing fills the last seventy pages of the book. The fine quality of investigation is sustained to the close. Here, again, the author has taken counsel from great scholars, and his acute observations really contribute to the elucidation of Hebrew and Chinese archæology. The only weak feature of the book is the Index, which does not do justice to the details and full literature of the contents.

S. Langdon.

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RECUEIL DE LOIS ASSYRIENNES: TEXTE ASSYRIEN EN TRANSCRIPTION AVEC TRADUCTION FRANÇAISE ET INDEX. By V. SCHEIL, Membre de l'Institut. $11\frac{1}{4} \times 7\frac{1}{4}$, 125 pp. Paris: Paul Geuthner, 1921.

The publications of the German Oriental Society appear in rapid succession, and continue to reveal the remarkable richness of the old Assyrian library of Assur. On plates 1–21 of his *Keilschrifttexte aus Assur Verschiedenen Inhalts*, Dr. Otto Schroeder has published two large tablets of an edition of laws which regulated society in Assyria. The more complete tablet VAT. 10000 consists of four long columns on obverse and reverse, eight in all, each containing more than 100 lines. The second tablet, originally of the same size, is less than half preserved. The Assur library contained also another edition of the Assyrian laws redacted on smaller tablets; Schroeder publishes fragments of four tablets of this edition. There are no duplicates in the material now made accessible. It is understood that an edition of these texts is being made in Germany. Meissner first called attention to some aspects of the laws in OLZ. 1920, 246, and in his *Babylonien und Assyrien*. A translation with notes by Jastrow appeared in the *Journal of the American Oriental Society*, 1921.

Naturally, the recovery of a considerable portion of the laws of the Assyrian kingdom is an event of great importance. Babylonian laws were already known from the famous Susa Stèle first published by Scheil and now more or less completed by tablets from Nippur and Warka. A new edition of all the Babylonian laws of the old kingdom and the few paragraphs of the Neo-Babylonian Code which are known, is in preparation by Mr. Driver, of Oxford, who intends to include the Assyrian Code as well. Assyriologists will receive the first transcription of the Assyrian Code from the hands of Professor Scheil with a feeling of satisfaction mingled with sentiment. Qui primus leges Babylonicas interpretatus est, quoque Assyricas. His edition has no notes to defend his interpretation, and consequently the brilliancy of some of his translations may be

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easily overlooked by those who do not read him closely. The paragraphs of the Assyrian Code are numbered from their order on each tablet; it is at present impossible to assign the tablets to their proper position in the Code.

I have been studying these texts a good deal myself, and on the basis of Scheil's edition I shall turn this review into a running commentary.

§ 1 (of VAT. 10000) concerns women who steal from a temple. The penalty is shearing of their hair. It was certainly preceded by a law concerning theft from temples by men. The latter law corresponded to § 6 of the Babylonian Code, where death was the penalty. Restore ll. 11 f. *gullubta ša-a* [*zinnisat lu-u*] *aš-ša-at* [*lu-u marat*].

§ 2 concerns women who are guilty of slander. Her husband is not responsible. On *miḳit pî tartīšî*, "She involved on herself a slip of the mouth," cf. *miḳit ṭêmi*, failure of the understanding.

The woman's children are involved, and if she is convicted they are not allowed to approach her husband.

§ 6. A married woman sets up a shop in the plain. Anyone who purchases from her is a thief. The word *kîdu*, plain, field, occurs several times in the Code, and is correctly translated. For *kîdu*, see Hilprecht, *Anniversary Volume*, 162; Thureau-Dangin, *Sargon*, 135.

§ 7, l. 82, *ilte-ša-ma*, "which is beside it." *Ištu, išti* > *iltu, ilti* is a favourite word for *itti*, with, beside, in vernacular Assyrian. See Ylvisaker, *Zur babylonischen und assyrischen Grammatik*, p. 54.

l. 84, restore *e-ri-im-ma*, inflamation. Sumerian *sa-samag* = *erimmu*, CT. 19, 4, 31; *an-šumug* = *erimmu*, with *ḫalû*, boil, *pendu*, inflamation, Voc. Boghazköi, 36, 6. See also Holma, *Kleine Beiträge*, p. 7; Meissner, SAI. 1959. See also *erimu*, boil, CT. 28, 29, 17; Holma, *Körperteile*, p. 4, n. 4.

§ 9. Here the law concerns a man who has embraced or kissed a man's wife. The penalty I restore as follows: His

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lower lip [*ina*] *ši-e-ri-im-te ša a-pa-a-še* [*i-sa-*]*ad-du-du inakis*; with the edge of a sickle shall they draw across and sever it. For *apāšu* = *pāšu*, sickle, sword, see CT. 12, 45, K. 4408, R. 26. For line 89 I prefer the reading *kipūru epussi*, "he embraced her."

§§ 10 and 11 belong together, i.e. § 10 extends to col. ii, 13, for there is no dividing line. From this point my section numbers are one less than Scheil's.

§ 11 (12), l. 16, *la-ni-ik-ki-me*. *me* is the particle attached for direct discourse, Thureau-Dangin, RA. 11, 154. The form is for *lu anik-ki*, "Let me cohabit with thee."

§ 14. A man discovers his wife in the act of adultery. He may slay both man and woman. Or he may cut off the nose of his wife and render the man a eunuch, and mutilate his face. Or he may set them both free. The Babylonian cognate of the Hebrew *ṣārīs* occurs here as a dual *šarišen*, but the word has been known for some time; in fact, it was suggested by Delitzsch, H.W. p. 694, and proven by Jensen, ZA. 24, 109, n. 1. The usual form is *ša ri-e-ši*, *ša-réši*, Ebeling, *Religiöse Texte*, 135, ii, 14. It occurs in Aramaic dockets, Delaporte, *Epigraphes Araméens*, p. 14.

§ 17, l. 80, *igaddimuš*, probably for *iḳaṭṭimuš*, they shall circumcise him (?). See § 18, l. 92.

§ 20 corresponds to § 209 of the Bab. Code, and to § 19 of the Sumerian Code.[1] The fact that this law concerning gravid women occurs in all the law codes from the earliest times is not complimentary to the ancient peoples of Mesopotamia. The circumstance that a man by violence causes a gravid woman to have a miscarriage must have been fairly common among them. See below, § 50.

§ 21. *bit ḳāte*, the crucial word in this law means treasury, chest. Scheil undoubtedly had this sense in mind. I suggest the following restorations: *šum-ma ki-*[*di-nu ana aššati ina*] *bi-it ḳa-a-te id-*[*din i-tam-ma*] *ma-a šum-ma-a-ni* [*la i-di-mi*] *ù šum-ma aššа-at* [*ameli taḳtabi*] *ma-a it-ti-ka-an-ni* [*ù*]

[1] See this *Journal*, 1920, 508.

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amelu bit kâte [*šuate*] *amelu* (*ša*) *id-di-nu-ú-ni* [*a-na nari-it*] *il-ṭak*, etc. "If a protégé unto the wife of a man from the treasury gave (something) he shall swear saying 'I knew it not', and if the wife of a man said 'he cohabited with me', then the keeper of the treasury that man who gave shall go to the river without cords. If he returns from the river, as the husband did to the wife so shall they do to him (i.e. to the husband, for the accused is innocent)."

§ 23. *mummêrtu* is for *mu-ma'ir-tu*, mediatress, as Scheil has interpreted. Hardly the niph'al particle, but the pi'el of *ma'āru*. In l. 33, note the irregular permansive fem. sing. subjunctive, *ki-i ni-ku-tu-ni taḳtibi*, she said that she had committed adultery. Cf. *usbutuni*, *naṣutuni*, *ḫadiutu-u-ni*.

§ 24. In line 48 read *be-da-at*, she passed the night. Line 52, *aššа-su di-it-te*, but his wife knew (?), *ditte* for *tîdi* ?

§ 40 contains interesting legislation about the veiling of women in the street. All free-born married women and girls must be veiled. A man's concubine (*esirtu*) must veil herself when she went out with her mistress. Also a married hierodule (*ḳadištu*) must veil herself in public. But an unmarried hierodule could not wear a veil. A harlot (*ḫarimtu*) could not wear a veil. If anyone saw a harlot veiled he was obliged to seize her and bring her to the palace. He then received her clothing, leaving her only her adornments. She received fifty stripes, and pitch was poured on her head. And if a man saw a harlot veiled and neglected to seize her, he received fifty stripes, his clothing and razor (?) were taken from him, his ears were pierced, a string was passed through them and tied behind his back; he was compelled to do the king's service for a month. To veil a woman meant to marry her.

§ 42 contains an interesting reference to a ceremony of betrothal. If a man poured unguents on the head of a maiden it indicated that he had chosen her for his bride. At the same time he gave her some kind of implements called *ḫurupāte*, which signified betrothal. The word occurs in Thureau-

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Dangin's *Sargon*, 363, in a list of objects plundered from Muṣṣaṣir, *ḫurupate erî*, rakes or scrapers of bronze. I connected the word with late Hebrew *ḫārōpā*, PSBA. 1914, 32. It designated some kind of utensil which by custom signified the duties of a housewife. I would render this law as follows: "If a man in passion (*âmi*) unguents (*rāki*) of oil on the head of a man's daughter poured or in folly brought her *scrapers* they shall not make restitution." A man who on a rash impulse thus proposed to a girl lost his engagement presents, but he was, of course, by Assyrian law, not bound to proceed with the marriage. For *rākû* = *raḳḳu*, sweet-smelling ointment, see *raḳ-ḳu* = *busumtu*, balsam, K. 2036, 21 in CT. 18, 23. The forms *ruḳḳu* and *riḳḳu* are more common, and *rikku* is explained by a Canaanitish gloss as *zurwa*, Hebrew, *ṣ^{u}rî*, balsam. A Berlin vocabulary explains *šim-šar* by *raḳû*, *raḳḳû*. *Šakultu* for *sakultu*, folly, follows the ordinary Assyrian method of pronouncing *s* as *š*.

§ 45, l. 66, *uppušu*, they shall acquire. The verb is *epēšu*, to acquire, see Johns, *Deeds and Documents*, iii, 294.

§ 46, l. 101, *ištu. ilten tuššab*, she shall dwell with one (of her sons).

§ 47 is translated with good insight by Scheil. The law throws much light upon the practice of sorcery. § 2 of the Babylonian Code also emphasizes the prevalent superstition about witchcraft. The older law is less complicated. If a man accused another of sorcery and could not prove it, the accused was, at any rate, passed through the water ordeal. He plunged into the river, and if he perished he was guilty, and his accuser seized his house. If he survived, he was innocent, and his accuser was executed. The accused seized his accuser's house. The Assyrian law is more detailed. It reads as follows: "If either a man or a woman practised sorcery and were taken in the act, they shall prove them and convict them. They shall slay the practitioner of sorcery. The man who saw him doing sorcery or who heard it from the mouth of one who saw the sorcery who said to him 'I saw it',

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the hearer shall go and tell it to the king. If the one who saw it denies that which (the hearer) said to the king, he shall speak before the god *Gudbanda* of Shamash,[1] saying, even he, that he said it not. He (the accused of sorcery) is then innocent. The one who saw it and denied it, the king, if he pleases, shall interrogate and examine his past career (*kutallu*). A priest of mysteries (*āšipu*) when he arrives shall cause the man to speak (i.e. the accused), and that man shall say: 'The oath which thou hast taken unto the king and his son does not dissolve you.[2] Thou shalt swear by the tenor of a tablet which thou swearest to unto the king and his son.' Thus the accused had written evidence of his innocence."

§§ 50, 51, 52, 53 go into the circumstances of miscarriage and abortion in more detail than in § 20. The former law (§ 20) refers only to a miscarriage of a man's daughter and mentions no details. It is difficult to explain why it was separated from the main body of legislation on this point.

§ 50 refers to a miscarriage of a married woman caused by a blow inflicted by a man. He must pay the husband the price of a life. If the woman die they slew the violator. If the husband had no son they shall slay the violator for the miscarriage of a male child, but for a female child he must pay for a life.

§ 52. A man by a blow caused a harlot to miscarry. He was given blow for blow and fined for a life.

§ 53. A woman practising abortion on herself was hung to a tree and not given burial.

§ 59 = col. viii, 61ff., read *ibaḳan uz-ni-ša u-ḫap-pa u-pal-la-aš*. The remainder of VAT. 10000 is not inscribed. Col. i of VAT. 10001 is broken away, and less than half of col. ii

[1] The Gudbanda was an image of a mythological being, probably a divine bull and sacred to the sun-god. These images, along with images of Scorpion Men, Fish Men, and other astronomical signs mentioned in the Epic of Creation, stood at the gates of Assyrian temples. See Schroeder, *OLZ*. 1920, 243.

[2] 2nd pers. plur. of formal speech, for the singular. See also *dibbi-kunu* = *dibbi-ka*, iv R, 34, No. 2, 2.

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is intact. The first legible section concerns the right of primogeniture. The eldest son was entitled to two parts or to twice as much as the other heirs and he had the right to choose (*nasāḫu*) in some cases both of his portions, or at least one portion. The law contains the remarkable phrase *išti aḫê-šu pur-šu iṣalli*, he shall cast lots with his brothers, i.e. for the portions which remained after he had chosen one portion (*ištenit ḳāta*). This phrase is correctly translated by the editor. The word *pûru, bûru*, stone vase, is thus definitely proven to have been used for casting lots, and came to mean "lot", and passed into Hebrew as *pûrîm* in *ʾîmê pûrîm*, "the days of the lots," the Feast of Purim. The eponym names of Assyrian *limû*, years, seem to have been chosen by lot. At any rate, such is the inference made by Sayce from the date of the year 733 on John's *Deeds and Documents*, Nos. 90 and 415, where Bêl-dān, who had been eponym eleven years before, is said to be the eponym, *ina šanê pu-ri-šu*, by his second lot. The suggestion of Sayce, who connected *pûru* here with the Purim festival, was, therefore, correct, although almost no one accepted it, and Jastrow denied the interpretation outright. Sayce will derive deserved satisfaction from the verification of his shrewd suggestion.[1] The section is obscure. It concerns the inheritance of a field under cultivation from which the elder brother chooses two portions of the vegetables growing thereon. [*maru rabû*]-*u* 2 *ḳa-a-ta* [*ina ur-ki*] *inasaḳ ilaḳḳi*. And then his brothers (*ù aḫê-šu*) the vegetables together shall choose and take. After that the younger brothers have the right to choose anything on the field together with the improvements.[2] After this preliminary division of crops and property on the estate, the elder brother chooses one portion and shares the remainder with his brothers by lot.

§ 3 is obscure. Line 23 I would transcribe *lu ăal-la-ta*,

[1] See Johns, *Deeds and Documents*, iii, 154.

[2] *manaḫtu*, usually expenses, outlay for upkeep, but here and in col. v, 25, it means the improvements.

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and render the law as follows: "If a man among brothers who had not divided their inheritance either religious duty [*shirked* ?] or fled his portion (*ḳat zitti-šu*) of the property the king shall do as he pleases with."

§ 4 I would restore as follows. If brothers upon a field not divided [*išten aḫu*] one brother among them [*lu še'am lu*] *puḳla*[1] *izru*, sowed either barley or rye.

§ 6 is the longest and most difficult law in the Code. The difficulty is increased by the lacuna at the beginning. The law concerns the inheritance of property for which there are no direct heirs, but only a relative of the family. The interpretation depends upon the meaning of the term *amelu ILA*, which Scheil renders *amel našî* without translation. Preferable is *amel kinatta*, a member of the family. In lines 1–4 there seem to be references to acquiring the property by money, which is forbidden. After line 5 the details are clear.

"Within one month the member of the family shall make proclamation in the city Assur. Thrice in the city field and house which he took he shall cause to be proclaimed, saying: 'Field and house of such a one son of such a one in the district of such a city for my property (*a-na buši-ia*) I will take. Whosoever objection (*ba-ḳa* ?) and complaint have, let them bring their tablets, and lay them before the inspectors. Let them make complaint and justify it, and take possession.' They who within this one month have not yet even one of them brought their tablets at all[2] and placed them before the inspectors, the man (i.e. the *kinattu*) shall have full claim over his field and shall take it. At the time when the relative makes proclamation in the city Assur one of the ministers who is before the king, a scribe of the city of the relative and the inspectors of the king shall confer. Of the city where he took the field and house the governor and three great men shall confer. If the relative has made proclamation they

[1] The sign is Meissner, *SAI.* 689. See *PSBA.* 1914, 105.

[2] For *ṣdîni . . . la* = not yet, see Ylvisaker, ibid., 57. In line 22 read *ma-da-e* = *madê*, verily, at all.

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shall write their tablets and give to them, saying, 'In such a month the relative made proclamation thrice. He who in that month brought not his tablet and laid it not before the inspectors—his hand departs from the field and house. They are ascribed to the proclaimer which is the relative.' Three tablets which the judges write they shall . . ."

§§ 8, 9 concerning the moving of a boundary are unusually interesting. The laws take into consideration the great boundary, i.e. the line marked by stones which surrounded the entire estate, and the little boundary made of reed mats or palings, which surrounded the dwelling and garden. In line 21 read *ša-a būrāni*, i.e. of reed palings. For *būrānu*, see Meissner, MVAG. 1907, 161.

§ 10, *dunna*, is rendered "dike", perhaps rightly. But *dunnu* may be a loan-word from Sumerian *dun*, ditch. See *Sumerian Grammar*, p. 211.

§ 17 concerns the use of irrigating waters by neighbours. In line 4 and line 23 *ana šakāni*, for gardening, is preferable to a more ordinary sense of *šakānu*. For *šakānu*, to work a garden, see Ungnad, *Briefe*, p. 385.

Professor Scheil has good reason to be congratulated. The first edition of such difficult texts involves profound knowledge of lexicography and grammar, and he possesses the necessary equipment. Undoubtedly more fragments of the Assyrian Code will be recovered, and we all hope that he again will be their first interpreter.

S. LANGDON.

THE BRITISH MUSEUM EXCAVATIONS AT ABU SHAHRAIN IN MESOPOTAMIA IN 1918. By R. CAMPBELL THOMPSON, Esq., M.A., F.S.A. From *Archæologia*, vol. lxx. $11\frac{1}{2} \times 9\frac{1}{2}$, pp. 101–144, 6 plates.

The modern tell Abu Shahrain, which lies in the extreme south of ancient Babylonia, west of the present course of the Euphrates and about 12 miles south-west of the ancient city

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Ur, has long since been identified with the famous Sumerian city Eridu, centre of the cult of the water god Enki or Ea, and home of a great school of Sumerian theology. Located in the most desolate region of a notoriously inhospitable country, not even the lure of fame and tradition has been able to induce a well-equipped expedition to adopt Abu Shahrain as a site for excavations. J. E. Taylor, the intrepid British explorer of Babylonia, worked there for a short time in 1854, and from the few stamped bricks which he recovered the site was identified. Since that time Eridu has received no serious attention. It was most commendable on the part of the British Museum to seize the opportunity of exploration in the extreme south, and to have secured the services of Captain Campbell Thompson, soon after the British occupation of southern Mesopotamia. The Museum sent him to Eridu, and in the following year Dr. Hall, of their own staff, was sent to Muqayyar, the vast ruins of Ur. The results of the former expedition are admirably described in the brochure under review.

A good topographical drawing of the region of Ur and Eridu is given on p. 102. His description of the topography is most welcome to Assyriologists, for it rectifies a good many old misconceptions. From Ur to the south-west the land slopes slightly upward, until a low sandstone ridge is reached 6 miles east of Abu Shahrain. The sandstone ridge drops abruptly only 15 or 20 feet, and from that point to the mound the soil is perfectly flat. The intervening ridge must be very low, for the peak of the stage tower of Eridu can be seen from Ur. Apparently Eridu lay in a wide flat plain almost on the same level as Ur.

The author gives a good résumé of what is known concerning Eridu in history and tradition. Although it figures little in the early inscriptions and ceased to be of importance already in the age of Hammurabi, tradition regarded it as one of the oldest cities of Sumer, and it is mentioned as late as the seventh century. A Babylonian chronicle states that Eridu

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lay on the shore of the sea by which we commonly understood that it was situated on the ancient sea-coast. But Mr. Thompson makes a strong argument for regarding the "sea" not the Persian Gulf, but the great Euphrates lagoon. He observed a fact never before brought to the notice of archæologists, that the mussel-shells which abound in all strata are not marine shells, but freshwater shells. An incantation text seems to imply that Eridu lay at the mouth of the two rivers,[1] by which one infers the junction of the Tigris and Euphrates. If this statement refers to Eridu and not the lower world in this passage it is impossible to explain it on any assumption, except that the scribe refers to the junction of the Euphrates and the old canal the Shatt el Hai. This would mean that the old bed of the Euphrates reached the sea via the plain of Eridu from Erech. A Sumerian hymn concerning the building of Eridu[2] enables us now to state with certainty that Eridu actually stood on the bank of the Euphrates, and beside the sea. It also gives the name of the temple of Eridu as Esirra or Esira, for which a well-known epithet E-apsû, House of the nether sea, was often substituted. Its *ziggurat* was named *E-unir*.

> The temple is constructed with gold and lapis lazuli,
> Its foundation on the nether-sea (*apsu*) is filled in.
> By the river of Sippar (Euphrates) it stands.
> O Apsu pure place of propriety,
> Esira, may thy king stand within thee.

Other passages refer to the glory of the temple, and its quay-wall was of carnelian.[3]

The results of the excavation which consisted principally in soundings at various points are important. The explorer has brought to light numerous fragments of geometrical

[1] CT. 16, 47, 198.

[2] Published in *Historical, Religious, and Economic Texts*, Nies & Keiser, No. 23. Duplicate in my *Sumerian Liturgical Texts*, No. 20. An edition is in the press in the *Journal of the Society of Oriental Research*.

[3] *samtu*. Thompson found carnelian in considerable quantity, which tends to confirm the identification *samtu* = carnelian.

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pottery of the earliest period. This kind of pottery is characteristic of pre-historic Elam, and was found at Anau in Russian Turkestan, as well as in predynastic Egypt and Syria. Thompson concludes that the makers of this ware were not Sumerians, but proto-Elamites, or, at any rate, he argues that they belonged to the widely extended race of pre-historic times represented by the inhabitants of the earliest strata at Anau and Susa. The argument is based upon the accepted theory that the Sumerians did not make this fine type of pottery. Certainly the extensive explorations at Nippur, Lagash, and Umma have brought to light almost nothing of the kind from the earliest Sumerian period. Only one vase of the second or realistic period was found at Lagash. But the statuary, dress, and tonsure of proto-Elamitic times are obviously Sumerian, and I, for one, am not convinced that the Sumerians did not belong to the same race. Hall has also found the same type of pottery at Ur. This point is not yet settled, and I cannot see why it is not debatable.

The author gives a detailed and admirable account of the various kinds of pots which are unmistakably Sumerian, the flints and stone axes of the neolithic period and baked clay reaping knives. His drawings of the trenches and detailed data are a model of what such field work should be. But he and all Assyriologists had hoped for tablets and the discovery of the temple library. That pious expectation was not realized, only a few stamped bricks and round tablets inscribed with short lists of Sumerian words represent the sum total of the inscribed material. We now have for the first time from Eridu a stamped brick of Ur-Engur, "who built the temple of Enki in Eridu." Duplicates of the well-known Bur-Sin brick inscription were found. A copy is given on page 115, and a translation on p. 116. The text contains the word *sag-uš*, which Thureau-Dangin rendered by "he who lifts the head of". A new syllabar now in Berlin gives *mûkil rêši* as the Semitic equivalent, that is "supporter, patron".

A stamped brick of Nur-Immer, eighth king of the

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dynasty of Ellasar, is the most interesting inscription yet found at Eridu. A copy is given on p. 115, and a translation on p. 116 f. It reads: "Nur-Immer, the mighty man, the true irrigator of Ur, king of Ellasar, who has purged the rituals of the house of Ebabbar. Of Eridu, which since ancient days had been destroyed, its income he caused to be regular. He commanded to build it. Of Enki he built the abode, the holy, which he loved. Its designs (sculptures) of eternity he restored to their places." A duplicate of the Nabonidus brick stamp from Ur, No. 14, p. 296 of my *Neue Babylonische Königsinschriften*, and two fragments of other Nabonidus bricks afford welcome evidence of the work of the last Babylonian king at Eridu.

S. LANGDON.

Works on the Dutch East Indies

KOLONIAL INSTITUUT TE AMSTERDAM. Mededeeling No. IX. Afdeeling Volkenkunde No. 3. Volkenkundige Opstellen I. $12\frac{1}{2} \times 8\frac{3}{4}$, 104 pp., 10 + 14 plates. Amsterdam: het Instituut, 1917.

This volume contains two separate works. The first ninety pages consist of an anthropological dissertation by Dr. J. P. Kleiweg de Zwaan on the inhabitants of the Tanimbar (or Timor Laut) Islands, with special reference to their craniology. The rest is a brief study by Herman F. E. Visser of the native decorative art of Seram (or Ceram), particularly the north-western part of that island. Both *opuscula* are of a somewhat specialist character, contributing new data to our knowledge of two rather remote regions. The illustrations are good, the coloured reproductions of Seram designs being particularly pleasing.

KOLONIAL INSTITUUT TE AMSTERDAM. Mededeeling No. IV. Afdeeling Volkenkunde No. 2. PANDECTEN VAN HET ADATRECHT. IV. De overige Rechten op Grond en Water. Stuk A, Stuk B. $8\frac{3}{4} \times 6\frac{1}{4}$, pp. x, 1302.

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(Idem.) V. Het Erfrecht. $8\frac{3}{4} \times 6\frac{1}{4}$, viii + 634 pp. Amsterdam: het Instituut, 1918, 1919, 1920.

These are three tomes of a large compilation of Indonesian customary law still in course of publication. They are based on a number of different sources of very varying value, and must be regarded rather as materials for further study than as a final authoritative statement of law or custom. But subject to that inevitable qualification they are of the utmost value. Each article ends with a reference to the source from which it is derived, and there are full bibliographical lists of the authorities in question. It were much to be wished that the *adat* of the Malay Peninsula (and some other British possessions and dependencies) could be systematically set forth in a similar way before it has been modified out of all recognition by changing conditions and the effect of legislation. In the work under review so many persons have collaborated that it is impracticable to give all their names here; they will be found in the work itself, which, by the technical excellence of its preparation, does them every credit. It would be tempting to go into details and compare some sections of the customary law herein exemplified with that of other regions. But even if this were not rather a case of trespassing into the field of a journal of comparative jurisprudence, it is to be feared that I should not be allowed to use as much space here as an adequate treatment of the subject would necessarily demand.

Katalog des Ethnographischen Reichsmuseums. Band XIV. Sumatra-Supplement. Von H. W. Fischer. $10\frac{1}{2} \times 7\frac{1}{2}$, xviii + 127 pp., x plates.

(Idem.) Band XV. Java: vierter Teil. Anhang. Baduj und Tĕnggĕresen, Madura und umliegende Inseln (Bawean und Kangean). Von Dr. H. H. Juynboll. $10\frac{1}{2} \times 7\frac{1}{2}$, xxij + 163 pp., x plates. Leiden: E. J. Brill, 1920.

These are two volumes of the catalogue of the well-known Ethnographical Museum at Leyden. The objects dealt with

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are, of course, of the most miscellaneous character, but they are methodically classified and briefly but sufficiently described. A number of indexes, as well as bibliographical and other lists, besides the excellent plates and some illustrations in the text, add materially to the value of the catalogue. I trust that some day the collection itself will be more adequately housed, in quarters where its valuable contents can be conveniently inspected, which was not the case when I visited it some few years ago.

PARARATON (KEN AROK) OF HET BOEK DER KONINGEN VAN TUMAPĚL EN VAN MAJAPAHIT, uitgegeven en toegelicht door Dr. J. L. A. BRANDES. Tweede Druk bewerkt door Dr. N. J. KROM met medewerking van Professor Mr. Dr. J. C. G. JONKER, H. KRAEMER en R. Ng. POERBATJARAKA. (Verhandelingen van het Bataviaasch Genootschap van Kunsten en Wetenschappen, Deel LXII.) $10\frac{3}{4} \times 7\frac{3}{4}$, xv, 9*, 343 pp., one folding pedigree. 's Gravenhage: Martinus Nijhoff, 1920.

This relatively brief chronicle is of exceptional importance as being one of the two extant literary sources of fairly ancient date for the study of the history of Java in the thirteenth and fourteenth centuries. It was originally published in 1896 by that eminent scholar, the late Dr. Brandes, who furnished it with a translation and a copious and most valuable commentary. The present revised issue does not depart very widely from the first edition, but embodies facts which have come to light during the last quarter of a century, and suggests the solution of a number of small problems which had baffled the original editor. The language, while not as archaic as the old Javanese of the early inscriptions, is sufficiently far removed from modern Javanese to raise a good many difficulties. Several additional MSS. of the work have now been critically collated. Among the new notes added to the translation one in particular deserves to be mentioned, namely the suggestion on p. 140

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that the word Pamĕlĕkahaṇ in the text means the region of Malacca. If that conjecture is correct, it would follow that Malacca was in existence about the beginning of the fourteenth century. But this interpretation is at present quite hypothetical.

The editors seem to have done their work very conscientiously; indeed, their names are in themselves a sufficient guarantee of it. One cannot but regret that Professor Jonker (for some years one of our honorary members) should have died before he could put the finishing touch to his share of the work, but the notes bear witness to the fact that it was no small one.

GESCHIEDENIS VAN JAVA. Deel II. De Mohammedaansche Rijken tot de Bevestiging van de macht der Compagnie. Door W. FRUIN-MEES. $10\frac{1}{2} \times 7$, viii + 127 pp., 22 plates, and one map. Weltevreden: Commissie voor de Volkslectuur, 1920.

This is the second part of a popular history of Java and deals with the Muhammadan kingdoms and the gradual establishment of the Dutch East India Company in that island, comprising the fifteenth and sixteenth centuries, and about the first third of the seventeenth. I have not seen the first part, which no doubt dealt with the Hindu kingdoms of earlier date. The work is succinct and simply written, but I am glad to see that it is essentially sound and scientific. The latest sources of information have been used by the author, and if her work does not profess to be anything but an *œuvre de vulgarisation*, it is an excellent one of its kind. It is also well got up and illustrated.

SUPPLEMENT OP DE IN DEEL LXI, 3E EN 4E STUK, DER VERHANDELINGEN GEPUBLICEERDE NADERE AANVULLINGEN EN VERBETERINGEN OP DE BIJDRAGEN TOT DE KENNIS VAN HET MIDDEN MALEISCH (BĔSĔMAHSCH EN SĔRAWAJSCH DIALECT). Door O. L. HELFRICH. (Verhandelingen van

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het Bataviaasch Genootschap van Kunsten en Wetenschappen, Deel LXIII, eerste Stuk.) $10\frac{3}{4} \times 7\frac{3}{4}$, 60 pp. Batavia: Albrecht & Co., 1921.

This is a further supplement of addenda and corrigenda to a vocabulary of two Sumatran dialects of Malay, originally published in Deel LIII (1904) of the above Verhandelingen, and calls for no special remark.

HANDELINGEN VAN HET EERSTE CONGRES VOOR DE TAAL-, LAND- EN VOLKENKUNDE VAN JAVA. Solo, 25 en 26 December 1919. $10\frac{3}{4} \times 7\frac{1}{4}$, xxxi + 426 pp., 52 plates. Weltevreden: Albrecht & Co., 1921.

This, the first congress held in Java for the discussion of matters relating to the languages, literatures, ethnography, archæology, history, etc., of that island, is an event of importance; and its Transactions, now issued in this very pleasing form, are of the utmost interest. It is to be hoped that it is only the first of many such congresses, and will have worthy successors. There is no room here to discuss all the papers read on this occasion; I can only single out a few for special reference. There are several valuable contributions to our knowledge of the three principal languages and literatures of the country (Javanese, Sundanese, and Madurese). The early relations of Java with Southern and Central Sumatra are discussed by L. C. Westenenk, in a long historical paper, which, though to some extent hypothetical, is based on a great number of sources and will serve as a good starting point for further investigations. The relation of Javanese to Indian art is dealt with in a very fascinating way by Dr. F. D. K. Bosch, who essays to show that Javanese architecture is in no sense a mere copy of any particular Indian prototype, but has a large measure of originality, especially in its treatment of decorative features. Considerable interest attaches to an Arabic funeral inscription in a sort of Kufic character, dated A.H. 495, the most ancient Arabic record as yet found in Java, which is explained by J. P. Moquette.

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The formal meeting of the congress was preceded by an entertainment of native music and dancing, and on the two following evenings two Javanese plays were performed; an account of their plots is prefixed to these Transactions. The congress was held at Surakarta, the capital of one of the two surviving Javanese principalities, and it is to be noted that natives of the island took an active part in the proceedings and contributed some valuable papers. The numerous illustrations, many of them very beautiful, add greatly to the interest of this attractive volume.

WIR MENSCHEN DER INDONESISCHEN ERDE I. Die indonesische und and indogermanische Volksseele. Eine Parallele auf Grund sprachlicher Forschung. Von RENWARD BRANDSTETTER. 9×6, 21 pp. Luzern: E. Haag, 1921.

In this pamphlet, the first of a series, the author essays to show from linguistic data that the psychology of the Indonesians is in essentials the same as that of the Indo-Europeans. For this purpose he analyses and compares the words which denote "soul", "vital principle," "departed spirits," and various mental functions, etc., and has no difficulty in establishing analogies between the way in which such matters are expressed by these two unrelated groups of peoples. As usual, his method is linguistically sound, and his conclusions are of great interest. To what extent they can serve as a basis for wider psychological deductions is a matter I am incompetent to discuss. While freely accepting the essential unity of mankind, as evidenced *inter alia* by such facts as are here illustrated, one must bear in mind that they relate back to a somewhat remote period, and that subsequent differentiation, in various directions and at different rates of change, may have done much to create very diverse mentalities. Perhaps the learned author, after establishing the fundamental identities, will complete the picture by also giving us the characteristic differences; this would no doubt be equally interesting and important.

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GESCHIEDENIS VAN JAVA. Door W. FRUIN-MEES. Met een inleidend woord van Raden Dr. Hoesein Djajadiningrat. Deel I. Het Hindoetijdperk. $10\frac{1}{4} \times 7\frac{1}{4}$, iv + 113 pp., 30 plates, and 3 maps. Weltevreden: Commissie voor de Volkslectuur, 1919 (on the cover, 1920).

The second part of this excellent little work came to hand first and has already been noticed. This first part deals with the period of Indian civilization in Java, and attempts also to give some estimate of the standard of Javanese culture before the Hindus first settled in the island. It continues to the end of the great Hindu-Buddhist kingdom of Majapahit. The work is soundly based on the historical data derivable from the inscriptions, etc., so far as they had been deciphered when it was written (1918) and embodies the results of the century of research that had elapsed since Raffles published his *History of Java*. The latter was founded merely on garbled legends contained in comparatively modern native chronicles, and has now been entirely superseded by the study of the genuine contemporary records that have been interpreted since its time.

But this study is still in progress, and it is unfortunate that just after Mevr. Fruin-Mees had finished this first part of her work, fresh documents should have turned up which have thrown a new light on the early relations between Java and Sumatra, and particularly the influence exercized for some time by the latter island on the former. These newly deciphered records would have caused our author to modify some parts of the first few chapters of her book, if they had been available when she wrote. For the rest, she has done her work admirably, and the book makes very interesting reading. The portions devoted to the religions and arts of medieval Java, though brief, are adequate to the scale of the work, and are supplemented by very fine illustrations. The list of Errata is unusually long, but might be augmented by some additional cases, which are, however, mostly of trifling importance. I may point out that in the third map Cape Rachado is misplaced; it should be a little way south-east of Kĕlang. I have elsewhere already expressed my opinion

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that the "Saimwang" of the Nāgarakṛtāgama list of countries should not be read Sèmong (or Seumang or Semang, as here, p. 83 and map), but represents Sai, one of the Patani districts or "states", the word *mwang* being merely the conjunction "and".

OOSTERSCH GENOOTSCHAP IN NEDERLAND. Verslag van het Eerste Congres gehouden te Leiden op 4 en 5 Januari, 1912. $9\frac{1}{2} \times 6\frac{1}{4}$, vii + 55 pp. Leiden: E. J. Brill, 1921.

The Royal Asiatic Society welcomes the creation of a new sister society in the Netherlands. It is curious that in spite of the great interest taken by Dutchmen in various branches of Oriental study, and the excellent work done by many of them in contributing to the progress of knowledge in these departments, no such society had been established before. The Royal Institute at the Hague, an Orientalist body of the highest standing, confines its attention, for the most part, to the Dutch colonial possessions; so there was room for an association of a more general character and wider scope. This small volume contains the proceedings of the first congress of the new society, and consists mainly of abstracts of the papers read on that occasion, the sections represented being Semitics and Egyptology, Aryan studies (including Iranian), the Far East, and Hellenistic and Byzantine studies. There is not space available here to discuss the details of these contributions, but many of them are of much interest and deserve to be published in fuller form. A paper by Lieut.-Col. T. van Erp on the decorative features of the Hindu architecture of Central Java, should be compared with Dr. Bosch's paper at the Java congress of 1919: the points of view are curiously in contrast, inasmuch as the former authority maintains the essentially Indian character of these features, while the latter insists on differences from the Indian type.

C. O. BLAGDEN.

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THE CAMBRIDGE HISTORY OF INDIA. Edited by Professor E. J. RAPSON. Vol. I.. $9\frac{1}{2} \times 6\frac{1}{2}$, xxiv + 736 pp., 34 plates, 6 maps. Cambridge University Press, 1922.

Professor Rapson has projected, with the collaboration of other scholars, to publish the *Cambridge History of India* in six volumes, and this is the first volume dealing with ancient India from the earliest times till about the middle of the first century A.D. It is an imposing book containing 760 pages of print and 34 fine plates of coins and antiquities. It begins with a geographical description of India, and the surrounding countries and peoples, and includes in its historical purview all the kingdoms beyond India to the north and west that influenced India or into which Indian influence directly extended; and Dr. P. Giles propounds the theory that the Indo-European race arose in what was the Austro-Hungarian Empire.

The early history of India itself is dealt with in chapters that treat separately of the periods in which were composed the Rigveda, the Brāhmaṇas and Upaniṣads, the Sūtras, Epics and Law-books, and the Purāṇas, and of the Jain and Buddhist periods. The former are expounded by Professors Keith, Washburn Hopkins, and Rapson, and the last two by Dr. Charpentier and Dr. and Mrs. Rhys Davids. The materials for these are almost wholly the Sanskrit, Jain, and Buddhist literatures. These scholars have given a résumé of whatever can be gathered therefrom, expressing it so as to make it as nearly as possible historically a religious, social, legal, and political retrospect. As those periods are somewhat indefinite in duration and character, the accounts cannot take the shape of real history, though as general expositions they are full and excellent. This is the first part of the volume.

True history begins where the Persian Empire extended its conquests into India, and from then there are reliable materials available from Persian, Greek, and other foreign records and accounts, together with inscriptions and coins,

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and with some help from the lists of Indian dynasties in some of the Purāṇas. Professor A. V. W. Jackson deals with the Persian Empire, Mr. E. R. Bevan with Alexander's invasion, Dr. G. Macdonald with the Hellenic kingdoms of Syria, Bactria, and Parthia, Dr. Thomas with the Maurya Empire, and Professor Rapson with the dynasties that arose afterwards in India and on the frontier till the Scythian and Parthian invasions. South India and Ceylon are then noticed and Dr. Barnett states what is known of them—alas, tantalizingly little. Finally the monumental history is fully and clearly described by Sir J. H. Marshall with abundant illustrations. All this second part is excellently done, for each scholar is specially qualified to handle his subject, and he has real historical material to utilize.

The volume is enriched with a very detailed table of contents, a bibliography for each chapter, a chronology and a copious index. It embodies excellently the progress that research has now reached, yet there is a real difference between the above two parts as regards history. The second part makes solid advance in recovering lost history, and though all differences of opinion are not dissipated, yet the historical presentation will no doubt stand in all its main features. But the ancient portion of the first part is based almost entirely on literature that was composed by brahmans, who lacked the historical sense, and that does not deal with history. That manifestly is not a sound historical guide. Moreover, the Aryan conquest of North India was effected by warriors, and not by priests. The kṣatriyas maintained their own tradition as well as the brahmans, as was pointed out in this Journal in 1910 (pp. 1–5), and Professor Rapson has accepted the distinction in this book; but practically nothing has been incorporated from kṣatriya tradition in the Purāṇas and Mahābhārata, because it had not been critically investigated when this book was written in 1914. The whole of the ancient period will have to be reconsidered from the kṣatriya standpoint, not only as regards its political history, but also as

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regards its religious and social developments, and how important the latter may be may be inferred from the assertion in tradition that Indra originally was a non-Aryan god.

F. E. P.

THE BABYLONIAN TALMUD: TRACTATE BERĀKŌT. By the Rev. A. COHEN, M.A. Translated into English for the first time, with introduction, commentary, glossary, and indices. 8vo, xxxix, 460 pp. Cambridge University Press, 1921.

Among the legends woven round the Talmud, there is the one that this book could not be translated. The language is of an Aramaic peculiar to Babylon, resembling somewhat the Mandæan; the compilation is apparently unsystematic, subjects of diverse kind jostling one another in a manner which looks incoherent; the discussions and dialogues are very terse, seeming to lead to no definite conclusion; quaint stories mix with abstruse dialectics, the highest ethical conceptions are mentioned almost on the same page with minute trivialities of daily life and superstitions of many origins—all these seem to justify the belief that the book was untranslatable. And yet this has proved to be a mere legend, for the book lay open to every serious student; there was nothing mysterious in it or behind it, and in fact many a treatise has been translated during the last few centuries into Latin, German, and other European languages. Parts of the Mishnah, the Code from which the discussions in the Talmud start, have also been translated into English in the middle of the last century, and now the Rev. Mr. Cohen has given us for the first time a complete translation of one of these treatises. It is more or less typical of the rest, and anyone who has been able to master the original text with the help of this translation will find no great difficulties in grappling with the others. The subjects chiefly treated are prayers and blessings, and a careful student will find that

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though the thread seems to be continually broken by the details above mentioned, yet it is taken up regularly throughout the book and is never entirely lost to sight. It was not an easy task to find adequate English expressions for the terse, technical terminology which baffles the student when he first takes up the work. Of course, in a work of this kind, slips must occur here and there, but in view of the magnitude of the task accomplished, they can easily be condoned.

In addition to the reliable translation, which, of course, is the chief merit of the book, the author has accompanied the translation with marginal rubrics of contents and numerous explanatory footnotes. A long introduction, which seems to have been written for readers very little acquainted with the Talmud, is also unnecessarily apologetic in tone. The book is also made more serviceable by a glossary as well as by the copious indices of (1) rabbinical authorities cited, (2) Scriptural and liturgical texts, and (3) a general index of subjects.

The book has been printed with the usual care and beauty of the Cambridge University Press.

M. GASTER.

UN MONUMENT DES PREMIERS SIÈCLES DE L'HÉGIRE EN PERSE. Extrait de la Revue Syria. By H. VIOLLET and S. FLURY. 21 pp., 8 × 10 in., 11 plates. 1921.

The monument is the mosque of Nâyin, an out-of-the-way place on the edge of the great desert, and the date is inferred from the character of a Quranic inscription and from some ornament remarkable for its resemblance to a pattern in a convent of Wâdi Naṭrûn in Egypt. M. Viollet is to be thanked for again adding to our still scanty list of descriptions of early Persian mosques. The analysis of the inscription and decorative elements is undertaken by Mr. Flury.

A. R. GUEST.

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OBITUARY NOTICE

W. Harry Rylands, F.S.A.

William Harry Rylands was the second son of Thomas Glazebrook Rylands, a member of the well-known family of north country ironmasters and manufacturers, of whom his cousin, Sir William Peter Rylands, is perhaps the most prominent in the public eye. He inherited his life-long and absorbing interest in antiquity from his father, himself a munificent patron of nearly every branch of learning, a diligent and enlightened collector of books, a fluent writer on such diverse subjects as Ptolemy's geography, the early history of Lancashire, and meteorology, besides being a practical astronomer and mathematician. Both the subject of this note and his elder brother followed their father's bent at an early age, and Professor A. P. Duncan, F.R.S., left it on record that their house at Highfields in Cheshire, after he had "spent many hours in the libraries of Mr. Rylands and his two sons", seemed to him "more like a literary and scientific institute than a private residence". In his later days, Mr. T. G. Rylands turned his attention to the study of Eastern religions, and joined in succession the then recently formed Society of Biblical Archæology and this Society. He had previously been elected F.S.A. in 1877 and was made a member of the Royal Irish Academy eight years afterwards.

It was possibly from his father's study of the exact sciences that W. H. Rylands derived his great power of rapid yet careful and accurate delineation which enabled him to transfer immediately to paper any object of antiquity set before him, whether MS., inscription, scarab, or other museum exhibit, and this before the development of photography gave him an advantage that few archæologists possessed. But this gift first became known to Orientalists when he became Secretary to the Society of Biblical Archæology in circumstances already

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made known to readers of this *Journal* in the January number of 1919. Mr. Arthur Cates, in a subsequent report, did not exaggerate when he spoke of Mr. Rylands' acceptance of the office as "a fresh starting-point for the Society", and as "the period when its real development commenced", and the *Proceedings* with which he supplemented the earlier *Transactions* at once took a unique place among the publications of learned societies from the punctuality of their monthly appearance and the wealth of illustrations that they contained. For the first time even untried writers found a means of publishing either their discoveries or their views without waiting and with the Secretary's ever-ready pencil to help them, and it may be doubted whether this state of things has ever been repeated. Its effect on the fortunes of the Society may be judged from the fact that its numbers suddenly rose from 400 to 625.

In spite of the labour which this entailed and the tact and zeal displayed in recruiting fresh members and obtaining papers, he yet found time to make solid contributions to archæology on his own account. The Hittite question had not long arisen, and his first appearance in the *Proceedings* was in the year of his election, with "Inscribed Stones from Jerabis, Hamath, Aleppo, etc." Then, in 1880, came "Comments on the Boss of Tarkondemos", one of the first Hittite inscriptions to receive adequate treatment; in 1882 his "Aleppo Inscription", to which he returned the following year; in 1884, the "Terracotta Bowl from M. Schlumberger's Collection" and on "Engraved [Hittite] Gem from Nineveh"; in 1887, the "Inscribed Lion from Marash"; and in 1898, a complete *corpus* of the Hittite inscriptions up to then discovered. In all these cases the Hittite hieroglyphs, often much rubbed and doubtful, were more accurately and graphically delineated than they could have been by photography, and they have since been made use of by nearly every Hittologist. From this corpus, too, he was able to design a fount of Hittite type, which is still in use; and he may

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therefore be fairly claimed as a pioneer indispensable in the decipherment of this still mysterious language.

His Hittite work, however, by no means exhausted his activities in Oriental archæology. In 1888 he gave in the *Proceedings* the first of the Egyptian Magic Ivories, which have since been collated and interpreted. In 1884 he began the reproduction of the Hypocephali in the British Museum, which he continued until the death of his friend, Sir Peter Renouf; and in 1897 he published a *Biographical Record of Peter Lepage Renouf*, to which, in his thorough-going fashion he appended a list of all the scattered papers of that voluminous writer. Coupled with his excellent administrative work, he thus laid the Society during his period of office from 1878 to 1902 under an obligation which it would have been impossible to repay. Some slight evidence of the affection and esteem which he had at the same time inspired in the members was shown by the fine service of plate which they and other friends presented to him on his retirement.

His activity in other branches of learning was not less marked. Following again in his father's footsteps, he early joined the Holbein Society, for which he published a facsimile of "Ars Moriendi", a rare tract of 1450, and he also became a member of the Harleian, of which he was Chairman at the time of his death. For this last he edited in succession the *Heralds' Visitations* for the Counties of Bucks, Suffolk, Hampshire, Warwick, Stafford, and Berkshire, and those of Lincoln for the Lincoln Record Society. He also was much attracted by Freemasonry, and was a Past Master of the Masons' Company, Past Assistant Grand Director of Ceremonies, a Past Master of the Lodge of Antiquity, the *Records* of which he published, and Founder and for some time Secretary of the Quatuor Coronati Lodge, to whose *Transactions* he was a constant contributor.

Personally, Rylands was one of the most charming of men. Always modest and retiring, he never sought publicity or the

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distinctions to which his real learning entitled him. He was, too, entirely free from the jealousy and rivalry which is sometimes said with justice to be the bane of learned societies, and was always ready to put his knowledge and talent at the disposal of those who wanted his help. Hence he was an ideal coadjutor in archæological matters and rendered many more services to learning than have come to light. He was also one of the most warm-hearted of friends, with a keen sense of humour and a great fund of varied information. His death at the age of 74 followed on a painful illness of six years' duration, borne with perfect courage and patience; and only those who knew him well can tell what they have lost by it. His widow, formerly Miss Alice Mary Meymott, daughter of the late Charles Meymott, M.R.C.S., of Sydney, N.S.W., survives him.

F. Legge.

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NOTES OF THE QUARTER

It has been suggested that the title of the subject for the Public School Gold Medal Competition be altered from Tipú Sahib to Tipú Sultán. The President and Committee have agreed to this change.

By an unfortunate error the name of H.H. the Maharajah of Udaipur was placed on the list of those members who had not paid their subscriptions. The Secretary much regrets the mistake.

Society Biblical Archæology.—Will any members present or sell vols. i–x of the *Proceedings* ?

China Review.—Will members present or sell any of the following numbers in order that the Library may complete its set ? Odd numbers from vols. i–iv, vol. ix, and vols. xiv to the end of the series.

During August the exterior of the premises of the Society has been re-painted and done up.

Lectures.—The President opened the Session in October with a paper entitled "Some Indian Nuns and others"; Professor E. G. Browne will speak on "A Persian Library" in November; and Mr. Blagden lectures on "The Malay Peninsula" in December.

The Secretary begs to remind Non-Resident Members in the British Isles that according to the new rule their subscription for 1923 will be £2 2*s*.

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TRIENNIAL MEDAL PRESENTATION

At a largely attended meeting of the Society on 4th July the Triennial Gold Medal was presented to Professor Herbert A. Giles, Professor of Chinese in the University of Cambridge.

The President, Lord Chalmers, read a letter from Viscount Peel expressing his extreme regret that as he had to take charge of the Irish Constabulary Bill in the House of Lords the same afternoon he was compelled to ask to be excused from making the presentation.

Mr. L. C. Hopkins said that his task in speaking of the qualifications of Professor Giles to receive the medal was most welcome and grateful, but he confessed he could not carry it out in a spirit of entirely judicial dispassionateness. As his former official subordinate, as for many years his spiritual pupil, so to speak, and as from the first his unchanging friend, he naturally could not claim absolute and theoretic impartiality. If he were asked to formulate in a sentence the special mark and merit of Professor Giles's lifelong labours, he would say that beyond all other living scholars he had humanized Chinese studies. He had by his writings made more readers know more things about China, things that were material, things that were vital—he had diffused a better and a truer understanding of the Chinese intellect, its capabilities and achievements, than any other scholar. By his insight, his sympathetic appreciation, and his unflagging industry through something like fifty laborious years, he had been largely instrumental in lifting us out of that arrogant foolishness typified in Charles Lamb's story of the Chinese who burnt his house down in order to have roast pork for dinner. (Laughter.) From that dismal slough of despond the Western world was gradually shaking itself free, and one great cause was the slow but sure influence of such writers as Professor Giles and the late Eduard Chavannes, by the compulsion of rational explanation. (Cheers.)

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Sir Charles Addis said it would be impossible to exaggerate the influence which Dr. Giles exercised on Chinese affairs with increasing force as the years went on. It was significant of the thoroughness with which he had done his work that he had provided for the continuance of the succession of scholars he was following in the persons of his distinguished family. Speaking as a banker, he would say that banking and trading must depend in China, as elsewhere, for their success upon the degree of security on which their foundations were laid. The real source of insecurity, that which made trading and banking in China specially difficult, was just the misunderstanding and to some extent the misrepresentation which created a cleavage between East and West, and prevented a uniting of their forces. For years Dr. Giles had been an interpreter between Britain and China. It was not sufficient for the Chinese to understand something about us; it was equally incumbent if unity was to be attained that we should know something of the Chinese. (Applause.) Unfortunately the number of Chinese who had taken the pains to make themselves acquainted with our language, life, and literature contrasted most markedly with the small number of English people who had really taken any pains at all to acquaint themselves in any degree with any one of these things in regard to China. Professor Giles had done all he could to remove this reproach and to interpret to this country the ideas of the Chinese mind, but in no direction had he done better work than in the example he had set, especially to the younger members of the Anglo-Chinese community of a long life devoted with exhaustless zeal, self-sacrificing labour, and purity of ideals to the study and interpretation of the Chinese mind.

Sir John Jordan said he gladly paid his tribute to Dr. Giles as a member of the service to which he considered he still belonged—the Consular Service in China. While the foreigner in China generally failed to take advantage of the opportunities to study Chinese language and thought, he would make an

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exception in the case of the Consular Service, which might fairly claim to have done its duty in this respect. This was largely due to the wise policy of the British Government in establishing student interpreterships, whereby all men recruited to the Consular Service in China spent two years on probation in Pekin. He believed that Dr. Giles was one of the earliest batch of men to come under this most useful system, which had produced a great number of excellent scholars. He hoped that Sir Charles Addis and other heads of great banking and business concerns in China would do more than hitherto to encourage young men designated for service there to avail themselves of the splendid opportunities offered by the School of Oriental Studies. He added that he had always been a great admirer of the wonderful felicity of Dr. Giles's translations. He always felt that nothing could be better. (Cheers.)

The President said, the Royal Asiatic Society was founded ninety-nine years ago on the joint initiative of Henry Thomas Colebrooke and of Sir George Thomas Staunton, the latter of whom was a Sinologue and, indeed, the first Englishman to publish (in 1810) a translation from the Chinese. In this room there is a portrait of Staunton as a boy of 12—already able to talk Chinese—holding the train of Lord Macartney at the audience with the Emperor of China on 14th September, 1793; and opposite there is another portrait of him in 1807 at the trial of the fifty-two sailors of the *Neptune*. We are therefore closing the first century of our corporate life by what is incidentally almost a pious form of ancestor worship, in awarding to-day our triennial gold medal for Chinese studies, of which our co-founder was a pioneer.

This medal, founded in 1897 by the efforts of Sir Arthur Wollaston, "in recognition of distinguished services in Oriental research," has already been awarded eight times—the first recipient being my old friend and master, Professor E. B. Cowell, for Sanskrit studies. His successors were E. W. West, for Pahlavi, William Muir, for Arabic, G. U. Pope, for

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Tamil, Sir George Grierson, for Indian languages, J. F. Fleet, for Indian Epigraphy, Mrs. Lewis and Mrs. Gibson (jointly), for Syriac, Vincent Smith, for Indian History, and now Herbert Giles, for Chinese,—truly a catholic list befitting a Society with the motto of "quot rami tot arbores".

I, who am not a Sinologue, cannot vie with the learned Mr. Hopkins in appraising the scholarship of our Gold Medallist, nor have I that intimate acquaintance with men and things in China which informed so happily the meed of personal praise of Professor Giles as a man, which we have just heard from my friend, Sir Chas. Addis. But, though I am not a Sinologue, and have never set foot in China, I, in common with you all, am the grateful debtor of Professor Giles for opening to English readers the treasure chambers of Chinese history, literature, and thought. Let me quote to you the opening words of the Professor's preface to his delightful "Gems of Chinese Literature", written now forty years ago:

"English readers will search in vain for any work leading to an acquaintanceship, however slight, with the general literature of China. Dr. Legge's colossal labours have indeed placed the canonical books of Confucianism within easy reach of the curious; but the immense bulk of Chinese authorship is still virgin soil and remains to be efficiently explored. I have therefore (he says) ventured to offer an instalment of short extracts from the works of the most famous writers of all ages, upon which time has set an approving seal."

If I do not lead you to the Professor's "Tower of Contentment", or to his "Peach Blossom Fountain", it is because I ask you to view with me for a very brief space one general aspect of Chinese poetry, which is an aspect also of the life work of the Professor himself, namely, the interweaving of the practical life of governing with the literary life. Yesterday I was reading again Lord Rosebery's *Statesmen and Bookmen*, in the course of which he remarks that "nowhere in history so far as I know is there an instance of so intensely

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bookish a man as Mr. Gladstone—who was at the same time so consummate a man of affairs."

Thanks to our Medallist, who has broadened our outlook by introducing us to immemorial China, I take leave to differ, for we now know that many of China's greatest poets were also her greatest statesmen, particularly under the Tang Dynasties. I quote the following interesting passage from Chuang Tzu, to show "how the men of ancient China attained their dual citizenship and achieved greatness in two worlds through the doctrine of the guarded life: "Outwardly you may adapt yourself, but inwardly you must keep to your own standard. In this there are two points to be guarded against. You must not let the outward adaptation penetrate within, nor the inward standard manifest itself without."

And of those who carried out these precepts, Chuang Tzu finely remarks that: "They seemed to be of the world around, while proudly treading beyond its limits."

I am not in a position to say how far Chinese statesmen of to-day maintain the life-standard of their Augustan age, and, amid the crowding cares of office, habitually burst into deathless song. A possible clue to the poetic fecundity of some, at least of their predecessors, is furnished by the recurrent periods of spacious leisure which was theirs when dismissed from office or exiled from their homes. Be this as it may as regards China, it is certain that in the West—whether you take ancient Greece and Rome or modern Europe—we fail to find the great poets among the great statesmen. In the sub-acid words of Lord Crewe: "'Mute inglorious Miltons' may rest in the country churchyard, but not on the benches of the House of Commons," nor—he might have added—of the House of Lords. (Laughter.)

But if we turn from the first rank of statesmen to their lieutenants in the business of government, we come at once on a galaxy of names of high poetic rank. For this country I need cite three names only—Chaucer, Spenser, and Milton.

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And outside poetry, in the realm of belles-lettres and the humanities at large, we are fortunate indeed in our long roll of famous men who to service to the State have added abiding service to literature and thought. It is pertinent here to quote the words of Carlyle—adopted by Professor Giles himself as a motto for one of his books—"what work nobler than to transplant foreign thought?" And this brings me directly to the object of our meeting here to-day.

Professor Giles, it is now my privilege to hand to you our Triennial Gold Medal, the highest honour which it is in the Society's power to confer. We ask you to accept it from us as our tribute to the ripe scholarship and literary insight with which, amid the exacting duties of an honourable career as Consul in China, you have garnered for us so abundant a harvest from over half a century's labours in the field of Chinese language, Chinese history, and Chinese literature. (Cheers.)

Professor Giles, who was received with hearty applause, said he had to thank the Society in two senses for the honour conferred on him. The first sense was a purely personal one; but he would ask their attention more intimately to the second sense, in which he would offer them, if possible, still warmer thanks. He continued:—

This is the first occasion on which the Royal Asiatic Society has allotted its gold medal for Chinese studies. It will be a great encouragement to future students, who have little to look forward to at the present day in the way either of emolument or of honorary distinction. There are, of course, those dazzling stipends paid to Professors of Chinese by the Universities of Oxford, Cambridge, and, I believe, Manchester (laughter); while that of the Professor at the Oriental School in London soars, I am given to understand, into quite phenomenal figures. (Renewed Laughter.)

I am tired of calling Chinese the Cinderella of languages. Luckily, however poorly remunerated, to the genuine student this language is like blood to a tiger; once really tasted,

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always a man-eater—or a Sinologue, as the case may be. (Cheers and laughter.) For the benefit of those to whom this term may not be familiar in all its bearings, I may say that in China a Sinologue is generally regarded as a wild man whose judgment and other faculties have been seriously impaired by laborious days, and even nights, devoted to the study of Chinese. (Laughter.)

Many years ago, my old friend, L. C. Hopkins, openly declared that to speak of a man as a Sinologue was to think of him as a fool. (Laughter.) But, as the poet tells us, "Time at last sets all things even"; and Mr. Hopkins, a member of your Society, is now himself widely known as one of the most eminent Sinologues in Europe. (Laughter and cheers.)

Fears have been expressed of late, in public prints, that no new students are coming forward to take the places of those older ones who must soon disappear from the field. This is a view which, in my opinion, is only fit to be bound up with the pessimistic utterances which fall daily from the lips of the gloomy dean. I cannot see that the genus Sinologue is at all likely to become extinct. Rather would I say that Sinologues are—

> Like the waves of the summer, as one dies away,
> Another as sweet and as shining comes on.

There was the primeval wave, which carried on its crest—I am dealing only with British Sinologues—Morrison, Marshman, Medhurst, followed by the wave of Edkins, Legge, Wylie, Chalmers, McClatchie, Eitel, Mayers.

We have still with us some survivors from the later Victorian wave, with another huge tidal wave rolling up behind them so that it is difficult to say where one ends and the other begins—Parker, Hopkins, Soothill, Hillier, Brewitt-Taylor, Werner, Couling, Johnston, Steele, Warren, Fletcher, Waley, Arlington, Moule, Yetts, Hopkyn Rees, Woodward, McGovern, Morley, Hutson, Chatley, and many others, including that *rara avis* in Sinology, a woman, Mrs. Florence Ayscough.

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Thus, to me, the future seems full of promise. I feel that some day Chinese will have a triumphant innings, and my only regret is that I shall not be present to witness the realization of my dreams. (Loud cheers.)

The Chinese Chargé d'Affaires (Mr. Choa-Hsin Chu), in proposing a vote of thanks to the President, said that the Royal Asiatic Society was one of the oldest of such institutions to devote some of its attention to China. He would like to stress the value to China of the life work of such a scholar as the one they honoured that day. There were far too few students of Chinese literature and history, and it was almost an unknown field in the West, except for the initiated few. He was only following in the footsteps of those who had preceded him at the Legation in pressing for a better understanding in this country of things Chinese. Good relations could not be better promoted than by mutual study of the writings and ideas of their respective leaders of thought. He had always claimed that it was as easy for the Westerner to study Chinese as it was for the Chinese to study a Western language. He presumed that Professor Giles agreed with him on this point, but very few Englishmen believed it. The Chinese had seen with keen interest and gratitude the suggestions that the British Government should ear-mark certain sums over which they had control and which came from the Far East for the purpose of promoting Anglo-Chinese education (cheers), to be administered in such a way as to promote the interests of nationals of both countries. He trusted the Society would never lose any opportunity to help in bringing about a better understanding between the two countries, a bringing together of the older and new civilizations for which they stood. (Cheers).

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THE CENTENARY OF THE SOCIÉTÉ ASIATIQUE

The Centenary of our sister society, founded in 1822, was celebrated in Paris with great éclat on July 10–13. In addition to two mornings devoted to the reading of Addresses and papers the proceedings included a public commemoration at the Sorbonne in the presence of the President of the Republic, a reception at the Hotel de Ville, a preliminary meeting at the Musée Guimet, a ceremony in honour of Champollion at the Louvre, evening receptions by M. Émile Senart, President of the Société Asiatique, and by Prince Bonaparte, and a concluding banquet. There was a large assemblage of delegates from Societies and institutions, European, American, and Asiatic, interested in Oriental studies. The Royal Asiatic Society was represented by the Hon. Secretary, Dr. F. W. Thomas, and by Dr. Cowley, Dr. Hall, Professor Langdon, Mr. Perowne, Sir E. D. Ross, Members of the Council, most of whom were present on behalf also of other bodies; also Dr. Pinches, Professor Rapson, Mr. Lee Shuttleworth, and Mr. Weld-Blundell. In addition to the reading of the Address printed below the Hon. Secretary was called upon to deliver a locution at the Sorbonne. The whole of the proceedings will, it is understood, be recorded by the Société Asiatique in print. A volume dealing with the progress in various branches of orientalism during the century and edited by M. Finot has already appeared under the title *Le Livre du Centenaire*.

We cannot refrain from tendering to M. Senart, upon whom the greatest responsibility fell, and to his colleagues and all our French friends, our sincere congratulations upon the success of the celebration and our warmest thanks for their public and private cordiality and hospitality.

Advantage was taken of the occasion to hold meetings of delegates of the Entente Societies for the discussion of matters connected with the contemplated *Dictionary of Buddhism*.

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To the Société Asiatique

(Founded 1822)

Engaged in Celebrating the Centenary of its Institution

In tendering to the Société Asiatique its hearty felicitations the Royal Asiatic Society is fully aware that it is not commemorating the Centenary of French orientalism. Not to recur to times as remote as the thirteenth century, when Albertus Magnus was lecturing in Paris on the philosophy of Avicenna and Averroes, or even to the sixteenth, when there was a Chair of Arabic at the Collège de France, it cannot forget that the seventeenth century is illuminated by the names of Bernier, Chardin, and d'Herbelot, while the eighteenth discloses a constellation of scholars such as Du Halde, De Mailla, Renaudot, and Anquetil Duperron. At the moment when the recently founded Royal Asiatic Society was contemplating the agencies whence it would look for co-operation in its great task it was conscious of the commanding position of France :—

"France," it was remarked in a report published in 1828, "from the very early encouragement which she gave to the study of Oriental literature ; from the value and number of the Oriental works in her libraries; from her early intercourse with Siam ; from the able men she has had in her different factories in Asia Minor ; from the researches made by La Bourdonnais and Dupleix into every branch of the trade and politics of India ; from the works of Commerçon, Lechenarde de la Tour and Gentil on the science and natural history of India and the Indian seas ; from the knowledge acquired by the French Institute, while in Egypt, relative to that country, and its connection with Asia ; and finally from her having established at Paris a Society, whose sole object is to carry on researches relative to the literature and science of Asia, must be considered as one of the most able and efficient coadjutors which the Royal Asiatic Society of

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Great Britain and Ireland can have in prosecuting the researches for which it was instituted."

In no case, however, can the foundation of a Society such as yours fail to be momentous for the studies to which it is dedicated. It is not merely that such an association serves to focus the scattered rays emitted by the isolated planets and stars of genius; nor that it is able to maintain a standard, to instil a method, and to foster a spirit; nor even that it encourages the collaboration of workers in different, if adjacent, fields. Beyond all this it is apparent that a great society has a personality of its own; and in its degree it becomes an expression of intuitions which do not through being corporate or national lose their value as apprehensions of truth.

It is with profound satisfaction that the Royal Asiatic Society records the fact that the personality of the Société Asiatique has ever been congenial to its own. No cloud of war or peace has dimmed their initial cordiality. With ready co-operation the two Societies have opened the pages of their journals to mutual contributions of research; they have celebrated the notable achievements of each other; and they have at all times rejoiced to recognize by such titles as were at their command the outstanding figures in their respective memberships.

It would be vain to attempt even the most general estimate of the services rendered by your Society to the cause of Orientalism. The very first volume of your journal, with its articles above such names as Chézy, Jules Saint Martin, Abel-Rémusat, Silvestre de Sacy, Klaproth, Langlois, Garcin de Tassy, seems to map out wide spheres of influence dominated by great masters. And, when we pass from volume to volume and from series to series, and some names no longer recur, there are always successors who may not fear comparison with them, a Burnouf, a Stanislas Julien, a Quatremère, a Biot, a Caussin de Perceval, a De Slane, a Reinaud, a Botta, an Oppert, a Barbier de Meynard, a Barth, a Chavannes. To the living we must not refer by name; but we cannot be blind to the fact

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that your Society includes a group of scholars, representative of almost all branches of Oriental study, which in penetrating insight and in conscientious erudition is unsurpassed in any centre of learning.

There is no fear that the series will be interrupted. The field of our studies becomes ever vaster and more complex; and research not only discovers new spheres of work, but even, as in the case of Central Asia, creates them. These hundred years have witnessed large advances in our comprehension of the mentality and civilizations of Asiatic peoples from the earliest times. But the goal will not be attained until it becomes possible to discern, and feel, beneath all these developments the response of the one sole humanity to diverse environment.

The Royal Asiatic Society cannot on this occasion fail to evince its gratification at the thought that the close of the first century of joint existence finds the two bodies united in a special intimacy. The compact made five years ago was dictated by a feeling of friendship which was not long in taking a wider range. It was none the less designed as an act of constructive statesmanship for the advancement of learning. Force lay in the conviction that the edifice of orientalism could in the future be supported only on the solid basis of corporations of scholars. The recent multiplication of societies in countries east and west serves to confirm the principle; and we may look forward in time to an organization adequate to the burden of our many-sided undertaking.

Signed on behalf of the Royal Asiatic Society of Great Britain and Ireland,

CHALMERS OF NORTHIAM,
President.

7th July, 1922.

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PRESENTATIONS AND ADDITIONS TO THE LIBRARY

Books

Arbman, E., Rudra, Untersuchungen zum altindischen Glauben u. Kultus. Uppsala, 1922. *From the Publishers.*

Archæological Survey, India. Annual Progress Report, Hindu and Buddhist Monuments, Northern Circle, year ending March, 1921. Lahore, 1922.

—— Annual Report, Eastern Circle, 1920–1. Calcutta, 1922.

—— Annual Progress Report, Central Circle, 1920–1. Patna, 1921.

—— Memoirs No. 10. A guide to Nizāmu-d Dīn, by Maulvi Z. Hasan. Calcutta, 1922. *From the Government of India.*

Bengal District Records. Rangpur, vol. iv, 1779–85. Calcutta, 1921. *From the High Commissioner.*

Bombay Record Office. Press List of Ancient Documents, 1740–60. *From the Government of India.*

Bhasa, Die Abenteuer des Knaben Krischna, Schauspiel übersetzt, von H. Weller. Leipzig, 1922. *From the Publishers.*

Borua, Rai Sahib G. C., Ahom-Assamese-English Dictionary. Calcutta, 1920. *From the Assam Administration.*

British Museum. Hieroglyphic texts from Egyptian Stelæ, etc. Pt. vi.

—— Subject index of the modern books acquired 1916–20. London, 1922. *From the Trustees.*

Browne, E. G., A supplementary hand-list of the Muhammadan MSS. in the libraries of Cambridge. Cambridge, 1922. *From the Publishers.*

Buddhaghosâcariya, Papañcasūdanī Majjhimani-kāyaṭṭhakathā, edited by J. H. Woods and D. Kosambi. Pt. i, Suttas 1–10. Pali Text Society. London, 1922.

Calcutta University, Journal of the Department of Letters. Vol. viii. Calcutta, 1922. *From the Publishers.*

Ceylon Archæological Survey, Annual Report by A. M. Hocart. Colombo, 1922. *From the Colonial Secretary of Ceylon.*

Champollion le jeune, Notice descriptive des monumens égyptiens du Musée Charles X, seconde division. Paris, 1827. *From F. W. Thomas.*

Datta, Bhagavad, Manduki Siksa, or the phonetical treatise of the Atharva Veda, ed. from original MSS., Research Department, D.A.V. College. Lahore, 1921. *From the Publishers.*

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Davids, C. A. F. Rhys, Tikapaṭṭhana of the Abhidhamma Piṭaka. Pt. ii. Kusalattikan, with Buddhaghosa's Commentary from the Pañcappaka-ranatthakathā, edited. Pali Text Society. London, 1922.

—— and F. H. Woodward, The Book of the Kindred Sayings (Saṃyutta-Nikāya) or grouped Suttas. Pt. ii. Nidāna-Vagga. Pali Text Society, Translation Ser. No. 10. London, 1922.

Davids, T. W. Rhys, and W. Stede, The Pali Text Society's Pali-English Dictionary, edited by, Pt. ii. A–O. Chipstead, 1922. *From the Publishers.*

Fonahn, A., Arabic and Latin anatomical terminology, chiefly from the Middle Ages. Videnskapsselskapets Skrifter II. Kristiania, 1922. *From the Author.*

Fort St. George, Records. Letters for 1696–9. Madras, 1921–2. *From the High Commissioner.*

Fraser, J. D., Handbook of the Lisu (Yawyin) language. Rangoon, 1922. *From the Government of Burma.*

Grousset, R., Historie de l'Asie. 3 vols.: (1) L'Orient, (2) L'Inde et la Chine, (3) Le monde Mongol, Le Japon. Paris, 1922. *From the Publishers.*

Günter, H., Buddha in der abendländischen Legende? Leipzig, 1922. *From the Publishers.*

Henderson, J. R., The coins of Haidar Alī and Tīpū Sultān. Madras, 1921. *From the Government of India.*

Ibn Hodeil, La parure des cavaliers et l'insigne des preux, texte arabe, édité d'après le manuscrit de M. Nehlil, revu et corrigé sur l'exemplaire de la bibliothèque de l'Escurial, par L. Mercier. Paris, 1922. *From the Publishers.*

India Office, Press list of copies of ancient documents obtained from the, Vol. ii, 1789–99. Calcutta, 1921. *From the High Commissioner.*

Indian States, The, corrected up to 2nd January, 1922. Simla, 1922. *From the Government of India.*

Institut Français d'Archéologie Orientale du Caire, Mémoires publiés par les membres. T. xxxii, xliii, xlvii.

Chassinat, E., Un papyrus médical copte, traduit.

Berchem, M. van, Matériaux pour un Corpus Inscriptionum Arabicarum. 2me partie, Syrie du sud, Jérusalem "Ville". T. i, fasc. 1.

Jéquier, G., Les frises d'objets des sarcophages du moyen empire. Le Caire, 1921–2. *From the Publishers.*

Ivanow, W., Ismailitica. Memoirs, vol. viii, No. 1. Asiatic Society of Bengal. Calcutta, 1922. *From the Author.*

Iyer, V. V., Notes of a study of the preliminary chapters of the Mahabharata. Being an attempt to separate genuine from spurious matter. Madras, London, 1922. *From the Author.*

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Jardine, Capt. R. F., Bahdinan Kurmanji, a grammar of the Kurmanji of the Kurds of Mosul Division and surrounding districts of Kurdistan. Baghdad, 1922. *From the Author.*

Jesus Christ, sayings and acts of, in Arabic. Introduction by Rev. A. H. Sayce. 2nd ed., 1922. *From Sir W. Willcocks.*

Keith, A. B., Rigveda Brahmanas: the Aitareya and Kausītaki Brāhmaṇas of the Rigveda, translated from the original Sanskrit. Harvard Oriental Series, vol. xxv. Cambridge, U.S.A., London, 1920. *From the Publishers.*

Kincaid, C. A., Tales of Old Sind. London, 1922. *From the Publishers.*

Mahalanobis, P. C., Anthropological observations on the Anglo-Indians of Calcutta. Pt. i. Records of the Indian Museum, vol. xxiii. Calcutta, 1922. *From the High Commissioner.*

Massignon, L., Essai sur les origines du lexique technique de la mystique Musulmane. Paris, 1922. *From the Publishers.*

—— La Passion d'al-Hosayn-ibn-Mansour al-Hallaj, martyr mystique de l'Islam, exécuté a Bagdad le 26 Mars, 922. Étude d'histoire religieuse. Paris, 1922. *From the Publishers.*

Mercer, S. A. B., Assyrian grammar with chrestomathy and glossary. London, 1921. *From the Publishers.*

Patrologia Orientalis, T. xvi. Bayan, G., Le synaxaire arménien de Ter Israel, traduit.

—— Basset, R., Le synaxaire arabe jacobite, rédaction copte texte arabe, traduit et annoté.

—— Jugie, M., Homélies mariales byzantines, textes grecs édités et traduits en latin.

—— Périer, J., La perle précieuse traitant des sciences ecclésiastiques, par Jean, fils d'Abou-Zakariyâ, surnommé ibn Sabâ', texte arabe traduit. Chapitres 1–56.

—— Kugener, M. A., Triffaux, E., Les homiliae cathedrales de Sévère d'Antioche, suite. Homélie 77. Texte grec édité et traduit, versions syriaques publiées pour la première fois. Paris, 1922.

Provençal, E. Lévi-, Les historiens des Chorfa, essai sur la littérature historique et biographique au Maroc du xvi. au xx. siècle. Paris, 1922. *From the Author.*

Punjab District Gazetteers. Vol. xxv A. Gujrat District, compiled by H. S. Williamson. Lahore, 1921. *From the Government of India.*

Purser, Rev. W. C. B., and Saya T. Aung, A comparative dictionary of the Pwo-Karen dialect. Pt. i. Pwo-Karen–English. Rangoon, 1922. *From the Author.*

Richey, J. A., Selections from Records, Bureau of Education, pt. ii, 1840–59. Calcutta, 1922. *From the Government of India.*

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Rutter, O., British North Borneo, an account of its history, resources, and native tribes. London, 1922.
From the Publishers.

Saklatwalla, J. E., A bibliography of religion, mainly Avestan and Vedic. D. J. Saklatwalla Memorial Ser. No. 3. Bombay and London, 1922. *From the Publishers.*

Sarkar, B. K., The political institutions and theories of the Hindus, a study in comparative politics. Leipzig, 1922.
From the Publishers.

Senart, E., La Bhagavadgîtâ, traduite du Sanscrit avec une introduction. Les classiques de l'Orient. Paris, 1922.
From the Publishers.

Sharma, R. P., Nyayee Varna Nirnaya. *From the Author.*

Shastri, Ramgopala, Brihat Sarvanukramnika of the Atharva Veda, ed. from original MSS., Research Department, D.A.V. College. Lahore, 1922. *From the Publishers.*

Sind, Gazetteer of the Province of, B, vol. v, Nawabshah District. Compiled by J. W. Smyth. Bombay, 1920.
From the Government of India.

Société Asiatique, Le livre du centenaire, 1822–1922.
1. Historique de la Société, par L. Finot.
2. Cent ans d'Orientalisme en France, par des membres de la Société. Paris, 1922.

Soewignja, R. P. en R., Wirawangsa, Javaansche Bibliographie, met een Voorbericht door D. A. Rinkes. Bataviaasch Genootschap. 2 vols. Batavia, 1920–1.
From the Publishers.

Strauss, O., Des Viśvanātha Pañcānana Bhattācārya Kārikāvalī mit des Verfassers eignem Kommentar Siddhāntamuktāvali aus dem Sanskrit übersetzt. Kunde des Morgenlandes, 16 Bd., Nr. 1. Leipzig, 1922. *From the Publishers.*

Sykes, Sir P., Persia. Oxford, 1922. *From the Publishers.*

Trumper, V. L., Historical sites in Palestine. Cairo, 1921.
From the Author.

Wilson, W. R., Customary law of the Dera Ghazi Khan District. 1917–20. Vol. xvi. Lahore, 1922.
From the High Commissioner.

Pamphlets

Caland, W., Über das Vādhūlasutra, reprint from vol. i. Acta Orientalia. *From the Author.*

Creswell K. A. C., A provisional bibliography of Muhammadan architecture of India. Reprint from *Indian Antiquary*, vol. li, 1922. Bombay, 1922. *From the Author.*

D'Cruz, F. A., St. Thomas the Apostle in India. Madras, 1922.
From the Very Rev. Mgr. F. A. Carvalho.

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Fischer, A., Aus der religiösen Reformbewegung in der Türkei. Forschungsinstitute für Orientalistik. Nr. 1. Leipzig, 1922. *From the Publishers.*

Jannier, Rev. E. P., The Madhyama Vyāyoga, translated from the original Sanskrit, introduction and notes. University of Pennsylvania. Mysore, 1921. *From the Publishers.*

Lewy, J., Studien zu den Altassyrischen Texten aus Kappadokien. Berlin, 1922. *From the Author.*

Mahler, E., Zur Astronomie u. Chronologie der Babylonier Zeitschrift für Assyriologie. Bd. 34, 1922. *From the Author.*

Saklatvala, J. E., Tárcekh-e-Dilkoshayi Shamsheerkhany, Beezan wa Maneezeh. Bombay, 1911. *From Sir P. Sykes.*

Shastri, M. D., The Ṛg-Vedaprātiśākhya with the Commentary of Uvaṭa, ed. from the MSS. with introduction, critical and additional notes, English translation of the text and several appendices. Part of the introduction. London, 1922. *From the Publishers.*

Vogel, J. P., A British School of Indian studies in India. Read at the Joint Session of Oriental Societies, London, 1919. *From the Author.*

Waddell, L. A., Historical origin of the Tower of Babel and the name "Shinar". Reprint. London, 1922. *From the Publishers.*

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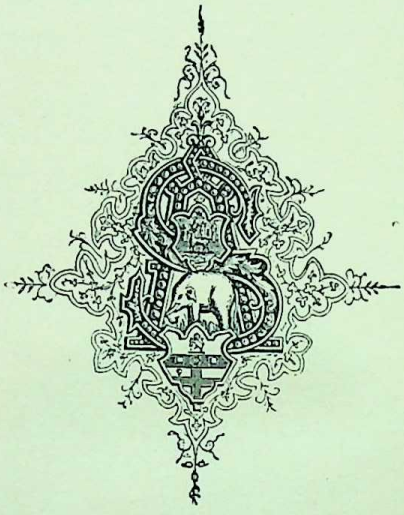

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